PROBLEMS IN THE STUDY OF ANCIENT MAYA SETTLEMENT AND SOCIAL ORGANISATION: INSIGHTS FROM THE "MINOR CENTRE" OF ZUBIN, CAYO DISTRICT, BELIZE

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ABSTRACT

For over a century archaeologists have attempted to formulate a realistic model for ancient Maya social organisation. A review of the current literature indicates that, although significant progress has been made towards achieving this goal, fundamental methodological and theoretical weaknesses remain. The most detrimental shortcomings can be summarised as follows: (1) settlement pattern studies in the Maya area have tended to focus too much on the polar extremes of the settlement continuum, and thus have not produced adequate data representative of all levels of the settlement hierarchy; (2) the limited nature of excavations, apart from those conducted in the larger centres, has hindered our ability to compare material culture assemblages from the various settlement levels; (3) these restricted excavations have also failed to furnish us with a comprehensive diachronic perspective, something which is required for an understanding of social relationships; (4) Mayanists have often employed interpretative schemes and associated terms in an uncritical fashion. As a result of these weaknesses, our reconstructions of ancient Maya social organisation often slight the archaeological data in favour of the more inclusive ethnohistoric or ethnographic descriptions. This dissertation will address the aforementioned problems through a detailed analysis of a small "minor centre" located in the upper Belize River valley. This site, known as "Zubin", was the focus of three seasons (1992-1995) of detailed archaeological excavations conducted by the author. These investigations were designed to generate a multifaceted and diachronically sensitive data base from a site representative of the least understood segment of the ancient Maya settlement continuum. It was felt that explorations at this level would provide insights relevant to a more complete understanding of social organisation. In addition, with the new perspective provided by the Zubin project, I evaluate the various models proposed for ancient Maya social organisation. In doing so I touch on the various weaknesses inherent in the study of this topic, and outline a program of analysis that should facilitate the formulation of a more realistic characterisation of ancient Maya society.

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INTRODUCTION

The ancient Maya of Central America offer one of the most intriguing cases for the application of social theory. Some of the most impressive works of art and monumental architecture ever produced are attributable to this civilisation. They also sustained an elaborate trade network, practiced intensive agriculture (recent studies have also suggested the presence of an intricate program of land tenure; see McAnany 1995:64-110), and developed sophisticated ideological, mathematical, writing and astronomical systems. The remains of Maya civilisation are to be found dotting the landscapes of modern day Belize, El Salvador, Guatemala, Honduras, and Mexico (see Figure 1.1). From the largest major centres such as Tikal, where the Maya constructed some of the tallest pre-Columbian structures in the New World, to groups of "housemounds" representing the dwellings of common folk, the ancient Maya legacy comes to us by way of a complex continuum of archaeological sites. This array of sites, exhibiting such variability in size and complexity, has long stimulated archaeologists to construct a model for ancient Maya social organisation. Although we are closer today than we were one hundred years ago to achieving this goal, a review of the current literature indicates that significant methodological and theoretical weaknesses remain. Not the least of these shortcomings has been the failure to produce a multifaceted understanding of "minor centres" and other middle level settlement units.

THE PROBLEM

As previously stated, the inability to produce wholly satisfactory models for ancient Maya social organisation reflects both methodological and theoretical shortcomings. In broad terms, settlement pattern studies in the Maya area have tended to focus too much on the polar extremes of the settlement hierarchy, at the expense of the highly variable middle level of settlement. Similarly, the comparatively limited nature of excavations outside of the larger centres has forced Mayanists to favour the multifaceted data produced within the latter segment of the settlement continuum, and gloss over the variability inherent within the rest of the settlement hierarchy. Concomitantly, because of the restricted character of those excavation programs initiated outside of the larger centres, a comprehensive, diachronic data base has yet to be achieved for the middle and lower levels of settlement. It is a prerequisite that such a

data base be developed before an inclusive understanding of social relationships can be achieved. As a result of the aforementioned weaknesses, our reconstructions of ancient Maya social organisation often slight the archaeological data, and favour the more detailed ethnohistoric or ethnographic descriptions. Finally, it is also clear that we as Mayanists have often employed interpretative schemes and associated terms in an uncritical fashion.

THE CASE STUDY

This dissertation will address the aforementioned problems through a detailed analysis of a small "minor centre" located in the upper Belize River region (see Figure 1.2). This site, know as "Zubin", was the focus of three seasons (1992-1995) of archaeological excavations conducted by the author, under the auspices of the Belize Valley Archaeological Reconnaissance project (Trent University, University of London). These investigations were designed to generate a multifaceted and diachronically sensitive data base from a "minor centre".

THE GOAL

Minor centres, and sites of similar size and complexity, are referred to here as "middle level settlement units". As alluded to previously, middle level settlement constitutes not only the most variable, but also the least understood segment of the ancient Maya settlement continuum. It was therefore felt that, given the fresh perspective that could result from operations within this understudied settlement level, the Zubin explorations could potentially generate a much needed data base that would contribute to our knowledge of ancient Maya social organisation. With the new middle level settlement perspective provided by the Zubin investigations, I aim to evaluate the various models proposed for ancient Maya social organisation. In doing so I will examine a number of weaknesses inherent in the study of this topic, and outline a program of analysis that should help to broaden our understanding of ancient Maya society A diachronic analysis will be carried out to demonstrate the utility of this new interpretative framework. This will allow for preliminary conclusions to be drawn concerning the nature of ancient Maya social organisation.

CHAPTER 1

MINOR CENTRES AND MIDDLE LEVEL SETTLEMENT UNITS: PROBLEMS IN THE STUDY OF ANCIENT MAYA SETTLEMENT AND SOCIAL ORGANISATION

In order to acquaint the reader with the intricacies of the problem, it is profitable to begin by discussing past and present settlement and social organisation research as it has been conducted in the Maya subarea. More specifically, the following summaries of ancient Maya settlement and social organisation are offered to underscore the importance of investigations within minor centres and other sites of similar size and complexity. Although these overviews are not exhaustive, they do contain significant detail. This was necessitated by the fact that thorough assessments of these topics have not been undertaken for some time. It is therefore required that a detailed review be presented in order to fully appreciate the ideas extended herein. Additional discussions of settlement archaeology in the Maya area can be found in Willey (1956b), Willey and Bullard (1965), Bullard (1960, 1964), Willey et al. (1965), Haviland (1966b), Thomas (1981), Vogt and Leventhal (1983), Pyburn (1989), and various papers in Ashmore (1981a). The topic of ancient Maya social organisation has been addressed by a number of researchers, including Ashmore and Willey (1981:14-15), Ball and Taschek (1991), Becker (1979a, 1979b), A. Chase (1992), Hammond (1982:179-197), Haviland (1966a), Kurjack (1974), Morley et al. (1983:225-226), Sharer (1993, 1994), and Willey (1956a).

Finally, it should also be stated at the outset that this dissertation centres on a roughly 1800 year time span, from the onset of the Middle Formative period to the end of the Late Classic period (ca. 900 B.C.-900 A.D.). This time range is dictated by the site itself, as Zubin does not exhibit evidence for habitation from the preceding Early Formative period (ca. 2000 -1000 B C.), or the following Postclassic period (ca. 900-1500 A.D.). It therefore only allows limited insights into the settlement patterns and social organisation outside of the ca. 1800 year time span of occupation.

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> *...expeditions had concentrated on the large sites, the Romes, Rheims, and Yorks of the Maya area, paying no attention to the Stowe-in-the-Wold and Shrimp-in-the-mud type of Maya centre* [Thompson 1963 160].

Settlement Archaeology: Towards the Recognition of an Intermediate Settlement Level

Although the pioneering studies of Ricketson (1937) at Uaxactun, and Thompson (1939) at San Jose, are often held up as examples of early settlement archaeology (Hammond 1983:22-24; Ashmore and Willey 1981:8-9), it is generally accepted that "settlement archaeology", as a distinct archaeological approach, was introduced by Gordon R. Willey (1953) with his 1946 project in the Viru Valley of Peru (Trigger 1989:282; see also Ashmore and Willey 1981:10). Willey (1974:153) concedes, however, that it was the anthropologist Julian Steward who stimulated him to employ settlement pattern studies in his Peruvian research (see also Trigger 1989:282). Willey (1953:xviii) relates that:

> During our first 'Viru discussions' in the summer of 1945, Julian H. Steward had suggested to me the lack of, and the necessity for, settlement pattern studies in archaeology. It was his belief that archaeology could best place itself in the position of contributing to the interpretation of the non-material and organisational aspects of prehistoric societies through the study of habitation and settlement type.

As Trigger (1989:279-280) notes, Steward (1937) himself had published an earlier paper which combined "archaeological and ethnographic settlement-pattern data" in an analysis of the peoples of the American southwest. Given this fact, it is best to view Steward as providing the impetus for settlement oriented studies within the broader discipline of anthropology, and Willey as the scholar who first featured this approach in archaeology. It should also be stressed that, although these individuals shared an interest in settlement studies, they differed substantially in their emphasis (see Trigger 1989:282). Whereas the cultural ecology of Steward led him to underscore the relationship between

settlement and environment, Willey viewed the study of settlement as a means to address a wider variety of issues. According to Willey (1951:195), settlement archaeology is concerned with "total community integration, ecologically and culturally" (emphasis mine).

In 1954, following his Viru Valley enterprise, Willey shifted attention to the Maya subarea and initiated a settlement oriented project in the upper Belize River region, at the site of Barton Ramie (Willey 1956a, 1956b; Willey et al. 1955, Willey et al. 1965; see Figure 1.2). This undertaking constitutes a significant point in the history of Maya archaeology, and settlement archaeology in general. The stated goals of Willey's Belize Valley archaeological survey were:

> (1) "the discovery, mapping, and excavation of habitation sites";
> (2) the exploration of "the relationship of aboriginal occupation to natural environments; the nature and function of buildings composing habitation communities; and the form, size, and spacing of these communities with reference to each other and to ceremonial centres";
> (3) to address "larger questions of land utilisation, agricultural potential, population densities, urbanism, the districting or zoning of ancient settlement, and the interdependence or independence of communities or community assemblages" (Willey et al. 1965:15).

Prior to the Barton Ramie investigations the majority of archaeological attention in the Maya subarea had been focused upon a number of the larger centres (e g. *Baking Pot* [Ricketson 1931], *Becan* [Ruppert and Denison 1943], *Copan* [Gordon 1896, 1902; Morley 1920; Stromsvik 1942, 1952; Trik 1939], *Lubaantun* [Gann 1904-1905; Joyce 1926; Joyce et al. 1927], *Naranjo* [Maler 1908a], *Palenque* [Blom and La Farge 1926-27], *Piedras Negras* [Maler 1901; Mason 1931, 1932; Satterthwaite 1937a, 1937b, 1943, 1944a, 1994b, 1944, 1954, 1952], *Pusilha* [Joyce et al. 1928], *Quirigua* [Hewett 1911, 1912, 1916; Morley 1935; Ricketson 1935; Stromsvik 1941], *San Jose* [Thompson 1939], *Tikal* [Maler 1911, Tozzer 1911], *Uaxactun* [Kidder 1947, Ricketson 1937, Ricketson and Ricketson 1937, A. Smith 1937, 1950; R. Smith 1937, 1955; Wauchope 1934], *Xunantunich* [Maler 1908; Satterthwaite 1950], *Yaxchilan* [Maler 1903]). With a few exceptions (e g. Copan, Piedras Negras, San Jose, Uaxactun), these

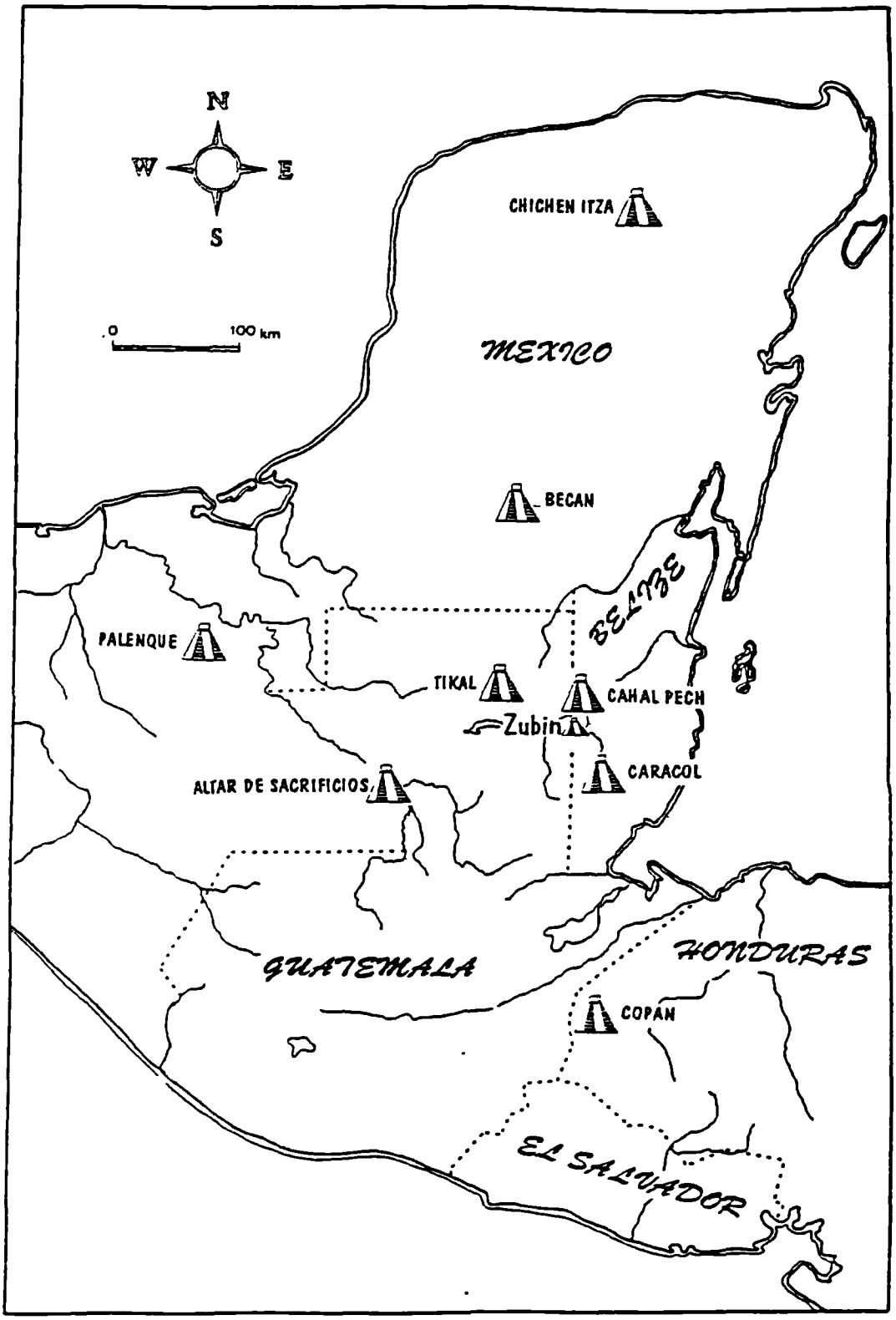


Figure 1 1 Map of Maya subarea showing the location of Zubin and Cahal Pech.

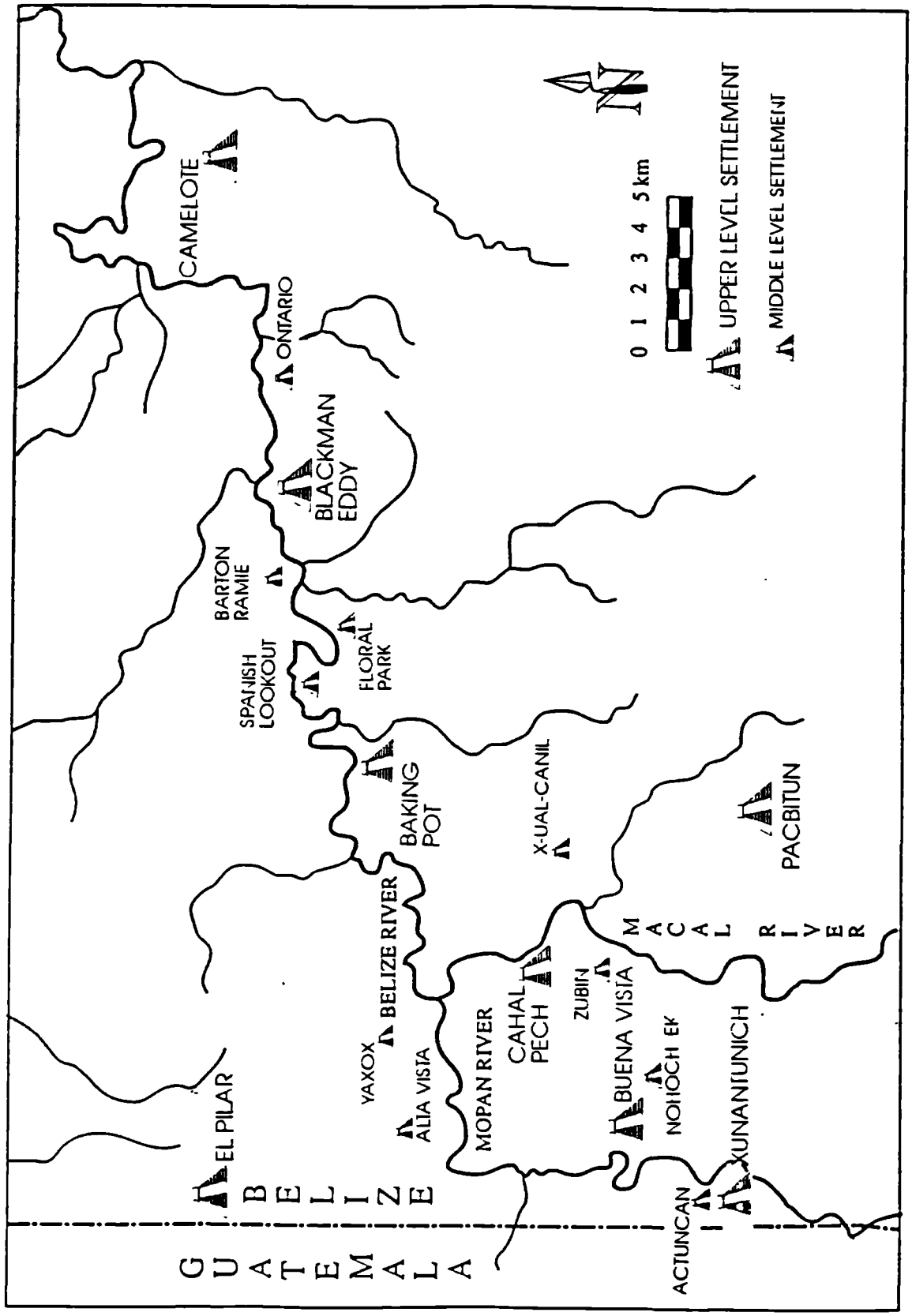


Figure 1.2. Map of the upper Belize River region showing the location of Zubin.

investigations emphasised the mapping, photographing, and recording of architecture and monuments, only minimal excavations being undertaken.

Limited explorations outside of the larger centres had indicated that the settlement continuum comprised a whole range of mound configurations of varying size and complexity (e.g Gann 1925:61-62; Joyce 1926 207-209, 226; Longyear 1952:2; Ricketson and Ricketson 1937; Shook and Smith 1943, E H. Thompson 1892; Tozzer 1913:149-150). However, only a few sporadic efforts had been made to excavate these simpler mounds and mound clusters (e.g. *Baking Pot* [Ricketson 1931], *Lubaantun* and *Pusilha* [Gann 1925: 140, 196, 228-29; Joyce et al. 1928:341-342], *Quirigua* [Hewett 1912:242-243]; *Uaxactun* [Wauchope 1934]). In 1954, at the outset of the Barton Ramie project, Willey et al. (1965:12) felt that "settlement groupings of small mounds, or house mounds, were very imperfectly known." Thompson's (1931) work in the vicinity of Mountain Cow was cited as one of the few "survey and excavation report[s] from the Maya lowlands that provid[ed] an archaeological documentation for even a tentative settlement reconstruction of a small Maya community, or community assemblage" (Willey et al. 1965:8; emphasis mine).

The Barton Ramie site, given its abundance of small housemounds and excellent surface visibility, offered Willey et al. the perfect opportunity to redress the large centre bias inherent in Maya archaeology, and, in doing so, introduce settlement archaeology to the Maya lowlands. The project was perceived as a means through which an understanding of the entire settlement continuum could be produced. As Willey et al. (1965:7) stated, "the first inquiries about 'ordinary dwellings,' 'houses of the people,' or 'house mounds,' [as opposed to special temple or palace mounds] marks a beginning interest in the larger question of total settlement pattern" (emphasis mine) The introduction of settlement pattern studies stimulated interest in settlement survey and housemound excavations throughout the Maya subarea (e.g. Bullard 1960; Fry 1969; Haviland 1965, 1966b; Sanders 1960). This was particularly true for the 1970s and 1980s, when a variety of settlement oriented projects were conducted (e g Ball and Taschek 1986; de Montmollin 1988, 1989; Ford 1981, Freidel and Sabloff 1984; Hammond 1975a, 1975b; Kurjack 1974, Leventhal 1981; Pyburn 1989; Puleston 1974, 1983; Rice and Rice 1979; Thomas 1981; Tourtellot 1970; Willey and Leventhal 1979; see also various papers in Ashmore 1981a) Although the impetus for these later studies can be directly attributed to the earlier work by Willey et al. at Barton Ramie, it is also

evident that the decreasing availability of funding played a role in the adoption of large scale settlement survey and mound testing. Such projects were significantly less expensive to conduct than intensive investigations within the more imposing Maya centres. Undoubtedly, the promotion of statistical sampling and the hypothetico-deductive method by a vocal group of processual archaeologists also had much to do with the adoption of this type of research program (see also Ashmore and Willey 1981.16, and Hammond 1983.28 for discussions of the above factors and their effects on settlement oriented projects). General trends in anthropology during the 1960s and 1970s, such as increased interest in community structures, "egalitarian" societies, and "peasant" studies, also made settlement analysis more attractive to archaeologists who were initiating projects at that time. Interestingly, even though settlement oriented projects continue to be initiated during the 1990s (e.g. Ashmore 1993; Ashmore et al. 1993; Ball and Taschek 1991; Conlon 1993, 1995; Fedick and Ford 1990; Ford 1990; Garber et al. 1993a, 1993b; Guderjan 1991; Yaeger and Ashmore 1993), the heightened understanding of ancient Maya writing (see Coe 1992) has recently refocused much of the archaeological attention on the larger centres which contain the majority of these texts.

Unfortunately, the increase in settlement archaeology has failed to provide a comprehensive understanding of the "total settlement pattern". This is due to a number of factors, all of which will be discussed in detail below. Many of these relate to the fact that for the most part the focus on the larger centres has continued virtually unabated. However, it is also true that outside of the larger centres settlement archaeology itself has failed in its mission to provide data representative of the entire settlement continuum. This may partially reflect the wording which Willey et al. (1965:7) employed in their initial discussions of the goals of settlement archaeology, with their emphasis on the investigation of "ordinary dwellings, houses of the people, or house mounds." A direct result of these two contrasting emphases (large centres vs. housemounds) has been an unhealthy concentration on the polar extremes of the settlement hierarchy. As McAnany (1995:158) has concluded, "ironically, the shift of attention in settlement archaeology to the most atomistic of residential structures - the household - only served to exacerbate the situation, and attention to the 'trees' obscured the 'forest'."

As a result of the polar bias, a whole range of intermediary settlement continues to be ignored. Willey et al. (1955) were the first to discuss the presence of this

settlement level. During their work at Barton Ramie they encountered an architectural assemblage which they postulated to have been "some kind of special precinct or politico-religious centre for the Barton Ramie site" (Willey et al. 1955:24; see also Willey 1956a, 1956b). This settlement cluster, later to be labelled BR-180-181-182 (Willey et al. 1965:249; see Figure 1.3), was initially termed a "small 'ceremonial centre'" (Willey et al. 1955:24). They described this small ceremonial centre in the following manner: "This 'centre' consists of a pyramid twelve meters in height and two long, low mounds of a type sometimes called 'palace' mounds. These three structures are arranged around a small raised courtyard." They also noted the presence of two other "small ceremonial centres" within the Barton Ramie area, Floral Park (Figures 1.2, 1 4) and Spanish Lookout (Figures 1.2, 1.5). The authors concluded that these "ceremonial centres within these communities of housemounds represent certain religious and political offices and services that were carried out for the benefit of the immediate local community" (Willey et al. 1955:25). They thus considered these architectural assemblages to have been both formally and, to a certain extent, functionally different from the surrounding housemounds *and* the larger centres.

Settlement Archaeology and the Typological Problem

Following the initial recognition of the intermediate settlement level, Willey (1956a, 1956b; Willey and Bullard 1956) attempted to formulate a model for ancient Maya settlement which would include the small ceremonial centres, which by this time had been renamed "minor ceremonial mounds" (Willey 1956a:778) This approach was dramatically amplified by Bullard (1960), following his reconnaissance of the northeastern Peten region of Guatemala. In this paper Bullard divided the settlement hierarchy into three levels; House Ruins (Figure 1.6), Minor Ceremonial Centres (Figure 1.7), and Major Ceremonial Centres (Figure 1.8). He defined "house ruins" in the following manner:

> The ordinary ancient Maya house was of perishable construction, probably basically similar to the pole and mud-walled, thatch-roofed houses used by the present-day Maya. The surviving remains are the terraces and substructure platforms upon which the houses themselves stood. The platforms appear as

> rectangular mounds usually with one axis longer than the other. These occur singly or in units of two, three, or four (rarely more) around an often raised court. In this paper, each of the units so formed is considered as an individual "house," but it should be understood that units composed of two or more platforms may actually have included more than a single dwelling structure. In my samples, units composed of one, two, and three platforms are numerically nearly equivalent; units with four or more platforms are definitely less numerous [Bullard 1960:359].

Within the survey area Bullard (1960:367) recognised that house ruins often formed "clusters." He noted further that in some instances one house mound was "somewhat larger than the others", and that small shrines were also present in some cases. However, he concluded that "such architecturally distinguishable buildings are by no means a consistent trait." (1960:357). In final analysis, Bullard deduced that the *majority* of house ruins, given their "abundance" and small size, were undoubtedly "the residences of the common people."

Within the Bullard study (1960:359-360), the term "minor ceremonial centre" was employed to describe those intermediary architectural clusters previously called small ceremonial centres during the Barton Ramie investigations (Willey et al. 1955:24). According to Bullard (1960:359), "the ruins designated as Minor Ceremonial Centres form a class apart: appreciably larger than the House Ruins, and appreciably smaller than the Major Ceremonial Centres." He went on to state that:

> Minor Ceremonial Centres may consist of only one large building..., but ordinarily they included one or more pyramidal structures, which are assumed to have been small temples, arranged around one, two, or three adjacent plazas...Only rarely are the plazas so separated that the centre can be considered as having more than one group. Small vaulted buildings of "palace" type may be present but they do not form the often extensive compounds which are usually associated with Major Centres. None of the many Minor Centres explored during the survey contained stelae, altars, or ballcourts [Bullard 1960 360].

Figure 1.3. Map of the "minor centre" of BR-180-181-182 at Barton Ramie (from Willey et al. 1965, Figure 143).

Figure 1.4. Map of the "minor centre" of Floral Park (from Willey et al 1965, Figure 179).

Figure 1.5. Map of the "minor centre" of Spanish Lookout and surrounding settlement (from Willey et al 1965, Figure 173).

Figure 1.6. Bullard's "representative" housemound configurations (from Bullard 1960, Figure 2)

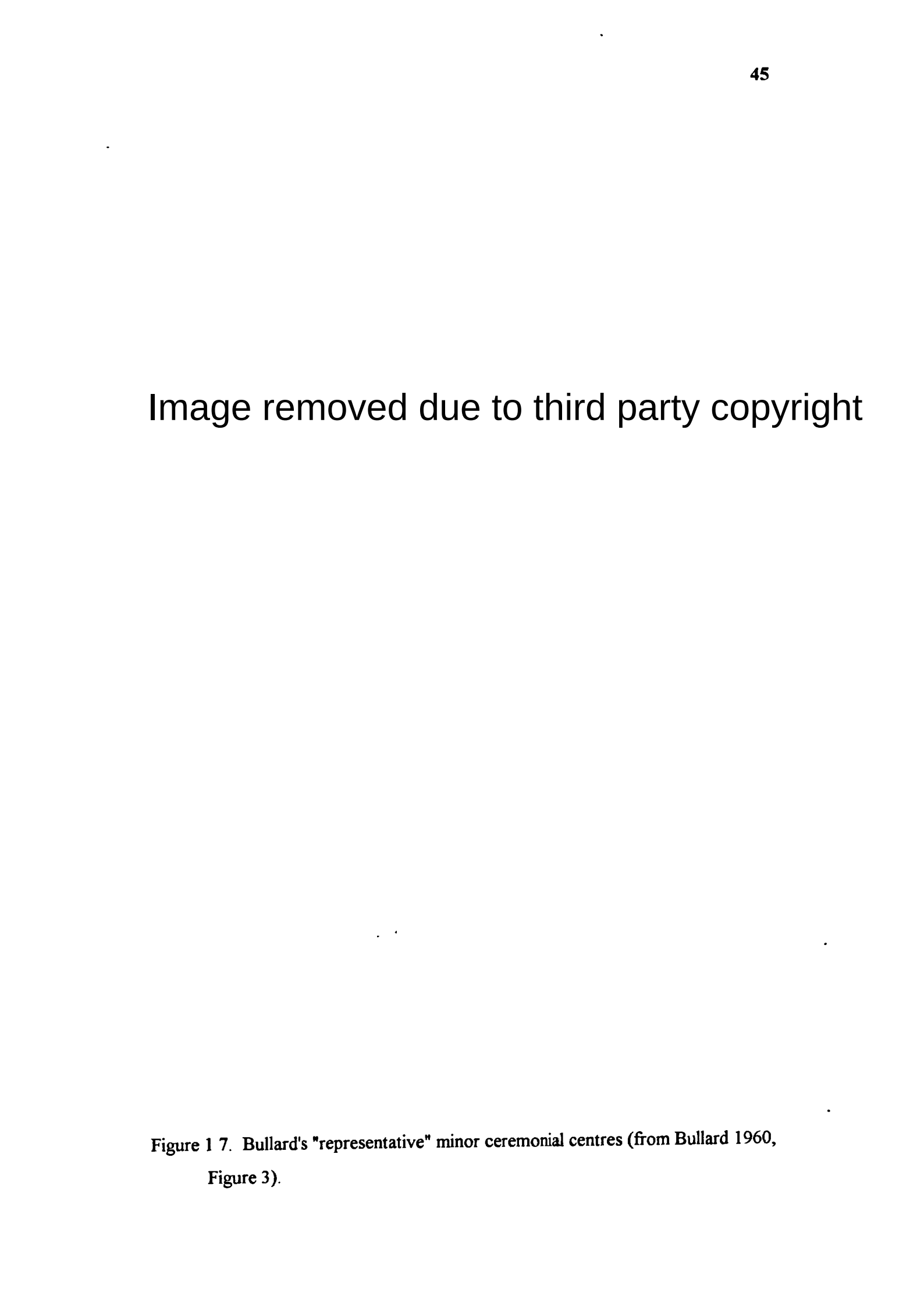


Figure 1 7. Bullard's "representative" minor ceremonial centres (from Bullard 1960, Figure 3).

Figure 1.8. Dos Aguadas, Bullard's "representative" major ceremonial centre (from Bullard 1960, Figure 4)

In considering the entire settlement population, Bullard (1960:367) observed that "[t]he frequency with which Minor Centres are encountered is clearly in direct proportion to the abundance and density of house ruins in the neighbourhood." He noted further that the "clusters" of house ruins formed "subdivisions of zones", the latter term employed to describe the area containing a series of house clusters and an associated minor ceremonial centre. Bullard (1960:368) also observed that the minor ceremonial centres were not necessarily located in the centre of the zones, but rather were regularly situated in "prominent" locations, often hill tops. He concluded that "zones of settlement were significant community units, the Minor Centre having served as the religious and civic centre for the community."

Finally, Bullard (1960:360-362) grouped the larger Maya centres (e.g. Tikal, Uaxactun, Xunantunich) under the category of "Major Ceremonial Centres." He indicated that these sites "vary greatly in size but all are substantially larger than the Minor Centres and contain larger, more elaborate buildings" (Bullard 1960:360). Bullard distinguished between the settlement levels even further in a brief discussion of Major Ceremonial Centre traits. He indicated that within these larger sites:

> Outstanding types of buildings are temples, often with vaulted roofs, on high pyramidal, terraced substructures, and lower but often extensive multi-roomed vaulted buildings called 'palaces.' Stelae and altars are usual features and, particularly in the larger ruins, many are sculptured with human figures and hieroglyphs. Most Major Centres in this region also contain at least one ballcourt. Many Major Centres include more than a single architecturally independent group and where the groups are not too far apart they are not infrequently joined by graded roadways [Bullard 1960:360-361]

In Bullard's (1960:368-369) view, major ceremonial centres were the "nuclei" for what he termed "districts." Districts were comprised of a number of zones, each with their minor ceremonial centres. As with these latter settlement units, major ceremonial centres were often located in prominent locales, such as hilltops (Bullard 1960.369). Bullard felt that major ceremonial centres served the needs of all the surrounding zones within its district. Although Bullard conceded that major ceremonial centres were likely the nuclei of religious and administrative activity for the districts, he also felt it "probable

that many of the Maya leaders lived scattered among the rest of the populations perhaps as a sort of rural nobility."

In summary, Bullard's work constituted the first *sophisticated* effort to classify and interpret the entire range of settlement remains within the Maya subarea. It should be stressed that this construct was based on surface reconnaissance; excavation data played only a limited role in its formulation. Still, Bullard's tripartite model was accepted by generations of scholars as a realistic archetype for ancient Maya settlement, and the term "minor ceremonial centre" was adopted by many as a label for the intermediate settlement units (e.g. Bullard 1964; Garber et al. 1993a:6; Hammond 1975a, 1975b, 1982:168; Thomas 1981; Willey and Bullard 1965; Willey et al. 1965). Others dropped the "ceremonial" portion, shortening the term simply to "minor centres" (Ford 1981.57; Hammond 1975b; Haviland 1981; Marcus 1983:469; Puleston 1983:2; Rice and Puleston 1981; Thomas 1981:105; Tourtellot 1983.52-53; Willey 1981:399). In fact, within Bullard's (1960) original paper the terms "minor ceremonial centre" and "minor centre" were used interchangeably. Importantly, the majority of Mayanists who readily adopted the Bullard scheme agreed as to what was meant by "minor centre" or "minor ceremonial centre," regardless of the label being utilised. Although others have employed different terminology (e.g. "satellite sites" [Fry 1969]; "marginal ceremonial group" [Coe and Coe 1956:381], "compound village" [Borhegyi 1956a:105], "single temple units" [Tourtellot 1970:410]; "outlying sites" [Carr and Hazard 1961:9], "isolated rural plaza groups" [Ball and Taschek 1991:158]; "agglutinated hilltop village" [Borhegyi 1956a:105]; "minor site" [Coe and Coe 1956:381], "rural manor house complexes" [Ball and Taschek 1986:28]; "neighbourhood centres" [Culbert 1974:67]; "heterogeneous households" [McAnany 1993]; "multifamily residential compounds" [McAnany 1995]; "single plaza ceremonial centre" [Garber et al. 1993b·10]; or "small nucleated sites" [Green 1970]), it is evident that they are still talking about the same type of site. In summary, there is general agreement that the intermediary settlement level exists

Some researchers, having recognised a greater range of settlement variability, have attempted to bring into use more detailed typologies for ancient Maya settlement. Some of these formulations have been more qualitative than others. In 1975, as part of his Corozal Project in northern Belize, Norman Hammond (1975a) introduced a nine-tiered construct He argued that although Bullard's formulation "remained the accepted model, . it is not precise enough to be used with the more sophisticated

analyses of interactions between sites in an overall network which are now being carried out with the aid of locational theory and recent advances in epigraphy" (Hammond 1975a:40). He concluded that Mayanists "need[ed] to look more closely...[at]...the relative size and complexity of sites as recorded archaeologically in order to appreciate the distinctions." Within the typology he devised, Hammond (1975a: 41-43) divided Bullard's house ruin component into four categories, "single isolated house-platform" (Level 1), "house-compound or plazuela" (Level 2), "informal cluster" (Level 3), and "formal cluster" (Level 4). Hammond (1975a:42) continued to employ the term minor ceremonial centre (Level 6) "as Bullard described it", in his discussions of what he considered to be "the small-scale version of a major centre." According to Hammond, minor ceremonial centres "possess[ed] ...2 or 3 defined plazas, each containing at least one major structure, and with evidence of differentiation in plaza function, with one forming the focus of religious activity and one or two others having elite residences and/or administrative buildings." In addition, he (Hammond 1975a:41) suggested the presence of another apparently intermediary site type, the "minimal ceremonial centre" (Level 5; see also Ford 1981.57; Thomas 1981:108). These sites were distinguished from minor ceremonial centres by the number of defined plazas. Still, although the minimal ceremonial centre was smaller in size and less formal in plan than the minor ceremonial centre, Hammond still attributed "religious", "political", and "economic" functions to them. Above the level of minor ceremonial centre, Hammond (1975a.42-43) divided Bullard's major ceremonial centre into three categories, "small major ceremonial centre" (Level 7), "medium major ceremonial centre" (Level 8), and "regional ceremonial centre" (Level 9). These sites were differentiated from each other based on size and degree of elaboration, and distinguished from the minor ceremonial centres based on size and the presence of features such as ballcourts and stelae.

Willey (1981:403) doubts whether the basic settlement data studied by Bullard and Hammond differed very much, and argues that the divergences in their typologies reflects the fact that the Bullard typology is a result of the "lumping" of settlement units, whereas the Hammond construct is the outcome of "splitting" them. Even though Hammond's typology more accurately reflects the diversity inherent in the overall settlement continuum, there remains a problem in that the construct is difficult to apply in contexts other than the one in which it was formulated. Specifically, although this typology may work well with the sample generated by Hammond in Corozal, a

phenomenon which obviously reflects the fact that the settlement sample itself was employed to formulate the typology, difficulties arise when one attempts to classify sites from other parts of the Maya subarea. This problem is especially true for the minor ceremonial centres and minimal ceremonial centres. Given the variability within this segment of the settlement continuum, the rigorous, monothetic typology offered by Hammond is too confining to be employed effectively in the majority of cases. Sanders (1981:359), in a brief discussion of the Hammond construct, has concluded that "[i]n reviewing his data my feeling is what he actually has is an endless gradation of minor and major centres with no very clear-cut hierarchical ranking."

Ashmore (1981b) has offered a qualitative typology similar to the one presented by Hammond (other qualitative constructs include Ball and Taschek 1991:157; Borhegyi 1956; Sanders 1960; Thomas 1981; Tourtellot 1970; Willey and Leventhal 1979). However, this typology restricts itself primarily to the lower level of settlement, with only passing attention paid to the intermediary level. With reference to this latter settlement level, Ashmore (1981b:56) concludes that: "[h]ere is where I think the behavioural and physical phenomena are so complex that it becomes less profitable to deal with centres as settlement 'elements' or as discrete, ranked types, than to treat them as expressions of more continuously distributed dimensions of complexity."

In contrast to the aforementioned qualitative approaches, other scholars have presented more quantitatively generated "site hierarchies" (e.g. Adams 1981, 1982; Adams and Jones 1981; Guderjan 1991; Turner et al. 1981). Within these analyses numerical values are assigned to various surface architectural features and monuments. For example, within northwestern Belize, Guderjan (1991:104) has employed the formula: (number of courtyards) + (number of ballcourts) + (number of stelae) + (number of plazas x 2) + (numbers of large buildings x 0.5) = site score. This is in fact one of the more complex calculations offered by practitioners of quantitative approaches. Adams (1981, 1982; see also Adams and Jones 1981) employed the simpler formula of: (numbers of acropoli x 2) + (numbers of courtyards) = site score. The premise underlying these studies is that "hierarchies in settlement [are] directly linked to levels of socio-cultural complexity" (Guderjan 1991:103). This assumption relies on two factors: (1) that a greater "volume of construction" reflects a larger population, and hence more "political authority and power"; and (2) that the presence of other features, such as stelae and ballcourts, similarly attests to increased "political power" (Guderjan

1991:104). Although the assertion that increased site complexity attests to increased political power and authority is not necessarily incorrect, it is not clear whether the material residues of social complexity are as amenable to quantification as these authors would have us believe. One is left to consider what socio-economic or socio-political differences the "site scores" might suggest When one turns to the intermediate level sites this problem of socio-economic and socio-political significance looms even larger. Where many intermediary sites may show a similar site score given the quantitative analysis (e.g. Guderjan's sites with a 6-3 score), can we be certain that they are qualitatively similar?

In relation to this, it is interesting that after completing his quantitative site score analysis, Guderjan (1991:105) reverts to a more qualitative, "Hammond-like", eight-tiered typology. Within this construct, sites with differing site scores are commingled (i.e., *Type 4* is represented by sites with scores ranging from 11.5 to 2; *Type 5* with site scores of 6 to 3). Although Guderjan concludes that this is not a problem, as it results from limited investigations at a number of the sites (and he may be partially correct), I prefer to see these discrepancies as a methodological limitation, particularly with regard to the ability to accurately classify intermediate level sites. In any event, there are clearly substantial differences between Guderjan's quantitative and qualitative classifications. In the end, all of these quantitative studies once again underscore the variability inherent in the settlement continuum. This variability, viewed as a series of confounding factors, may be such that we cannot hope for quantitative analyses to provide anything more than a gross, comparative measure of site "complexity" (but see Abrams 1994 for a more promising approach).

Given that the overall settlement variability appears to rule out the use of rigid, monothetic classification schemes, such as the one proposed by Hammond, and that the quantitative analyses have failed to produce anything more than broadly ordinal site hierarchies, it may be profitable to return to a more malleable, polythetic construct. This rings especially true when one considers that we are dealing with a settlement *continuum* as opposed to a population of discrete settlement types (see D. Chase et al. 1990:500; Culbert 1991:328; Haviland 1970 190). Ashmore (1981b.41) has pointed out that "the crux of the typology problem is that, partly because of the ambiguity of the form-function correspondences, we still lack adequate detailed analyses justifying identification of particular feature 'types' with particular, discrete activities or sets of

activites." It is tempting, given this scenario, to restore the original Bullard formulation. Unfortunately, not only is this construct too unrestricted to permit detailed, analytical assessment of the variability within the settlement continuum, its functional connotations and terminology also make it untenable. A compromise appears the most fitting solution, wherein the variation of the settlement continuum is divided into a loose hierarchy of settlement levels or types (e.g. Bullard 1960), each level in turn being sub-divided into a number of recognisable, *polythetic* sub-types (e.g. Ashmore 1981b; Hammond 1975a).

Settlement Archaeology and Middle Level Settlements: Towards a Practical Typology

I propose that Mayanists adopt a very loose, tripartite site typology, with the following settlement types: *Lower Level Settlement, Middle Level Settlement,* and *Upper Level Settlement* (see Iannone 1993a, 1993b, 1994a, 1994b). Within this scheme it is recognised that one is *artificially* partitioning a highly variable continuum. In recognising this it is assumed that at the junction of each partition a "grey" area will exist, where the ability to assign a particular settlement unit to one or another settlement level becomes increasingly subjective. However, such problems accurately reflect the reality of dividing a continuum, and in the end attest to the validity of employing a less rigid typological scheme. The flexibility of classification does mean that highly variable settlement units will be amalgamated together within the broad categories. This also reflects the variability inherent in the settlement continuum. In the end, if we view the classification as a means to an end (i.e., as a step leading towards analysis of the variability both between *and* within the settlement levels), as opposed to an end onto itself, the variability within the broad types does not constitute a problem.

Each of these broad types is further divided into a number of loosely defined (polythetic) sub-types (e g. "patio groups", "plazuela groups", "minimal centres", "minor centres", "major centres"), in order to provide a more detailed understanding of what settlement forms are typical of each settlement level In doing so, I hope to show that Mayanists need not limit their use of these *subtypes*, as many seem to serve our purposes just fine. Rather, I wish to stress that, given the overall variability in the middle level of the settlement continuum, it becomes increasingly difficult, and impractical, to pigeon-hole these particular settlement units into idealised (monothetic) types (e g.

Hammond 1975a). Having, I hope, justified the use of such a classification strategy, I now wish to outline what I perceive to constitute the three settlement levels.

Lower Level Settlement. Within this scheme the term "lower level settlement" is employed in discussing the smallest, and least complex architectural units and assemblages within the overall settlement continuum. Lower level settlement begins with the most basic unit of analysis, Bullard's (1960) solitary "housemound", Hammond's (1975a:41) Level 1 - "single isolated house-platform", or Ashmore's (1981:47) "minimal residential unit", and ends with Bullard's (1960) "housemound cluster", Hammond's (1975a:41) Level 4 - "formal cluster", and Ashmore's (1981:51) "group-focused patio cluster". The constituents of this settlement level are highly variable. However, the majority of this variability is attributable to expanded numbers of individual settlement units, and/or increased degrees of formal arrangement (see also Yaeger 1994; Yaeger and LeCount 1995). The remaining variability reflects the uneven distribution of some architectural features which exhibit slightly greater size and/or apparently functioned in a non-residential fashion (e.g. shrines; see Ashmore 1981b:51; Hammond 1975a:21). These occurrences may reflect numerous "developmental" factors (Ashmore 1981b:54; McAnany 1995:95, 99), although it should be stressed that, for a variety of socio-economic or socio-political reasons, certain groups do not enter the developmental trajectory at its beginning, but rather exhibit these features from the outset of their occupation. In any event, it is the presence of these traits which leads one into the grey area between lower level settlement and middle level settlement. These features (e.g. more elaborate residences, shrines) clearly indicate increasing socio-economic and socio-political inequality both within and between groups. Following the "developmental" model, an increase in such features is expected over time, and a whole range of architectural inventories becomes possible at this point in the settlement continuum. Some archaeologists may find it more appealing to assign certain of these more complex settlement units to the middle level settlement category. Others may feel more comfortable retaining these within the lower level settlement. Given the abundance of developmental trajectories available to any social group, and the resulting potential variability in settlement make-up, there can be no right or wrong classification at this juncture.

Middle Level Settlement Above the previously discussed grey area, consisting as it does of a multitude of settlement assemblages with recognisably larger architecture

and/or special function structures, one reaches a series of sites that have always been difficult to classify. As Ashmore (1981b:54) has noted, at this level "there is some question as to the nature of formally identifiable units", although "most Mayanists can agree on what specific sites are or are *not* 'major centres'" (Ashmore 1981b:55). This "middle level settlement" begins somewhere in the grey area, though admittedly a solid line cannot be drawn to suggest an actual starting point. In reality, many of the settlement units in the grey area, given a developmental model, would eventually develop into true middle level settlement units (e.g. McAnany 1995:95). Other sites of this level may have entered the developmental trajectory in the middle, for a variety of socio-economic and socio-political reasons, and thus have appeared as middle level settlements from their initial construction.

Bona fide middle level settlement begins with what Hammond (1975a:41) has called "minimal ceremonial centre[s]" (see also Ford 1981:57; Thomas 1981:108). In his definition, Hammond stressed that although such sites replicate many of the features present in lower level settlement, they differ in that the presence of at least one large non-residential structure suggests that these sites had a degree of "religious", "political" and "economic control". Such settlement units would once again differ very little from some of the grey area sites previously discussed, and may simply indicate further strides along the developmental trajectory, or again, a special series of social relationships which permitted initial construction as a middle level settlement site.

Following this progression through, one reaches the first genuine "minor centres" as originally discussed by Bullard (1960; see also Ford 1981:57; Hammond 1975a:42; Thomas 1981:108). Such sites are readily separable from lower level settlement by their greater size (i.e., spatial extent and structure volume) and complexity of overall site plan. An increase in the number of apparently non-residential structures also attests to significant differences between these sites and those of the lower level. Hammond (1975a 42) has noted that at this point on the continuum, sites begin to show clear differentiation between plaza or courtyard function. Whereas one courtyard may primarily serve a residential function, others may be the focus for religious and/or administrative activities. With this separation these smaller sites are beginning to exhibit a characteristic of the upper level sites (see Ashmore 1992). The presence of other distinctive architectural configurations within these middle level settlement units, such as eastern ancestor shrines (Awe, personal communication 1991), and restricted access

plazas (Ball and Taschek 1991:157), also attests to the "replication" of upper level traits. Similarities aside, it is still readily apparent that the greatest variability in site plan and architectural components occurs at this level

With the appearance of the aforementioned characteristics one reaches the grey area between middle level settlement and upper level settlement. Bullard (1960:360) has stated, and many others have assumed, that few other affinities occur between middle level sites and those of the upper level. He notes that many characteristics of upper level settlement, such as stelae, altars, ballcourts, and vaulted buildings (and one may add causeways) are generally lacking within "minor centres" (Bullard 1960:360, 1964:281; Willey and Bullard 1965:368). In his discussions, Hammond (1975a:42) does concede that, in the case of stone monuments, some minor centres may contain these features if they are "within the ambit of major centres." However, a review of the literature indicates that features such as ballcourts (see Garber et al. 1993:13-14), and stelae, although not commonplace amongst middle level settlements, do occur (see Iannone 1993b:14-15). These occurrences attest to the existence of a grey area between the middle and upper levels of settlement. Whether the presence of such features suggests a long, relatively *autonomous* developmental trajectory, a comparatively short developmental sequence marked by *dependency* on more firmly entrenched socio-political and/or socio-economic entities, or some variety of *semi-autonomous* interaction needs to be considered on a site to site basis. In sum, although middle level settlement units are the least susceptible to *discrete* classification, these architectural assemblages are still seen to comprise a loose but distinguishable set of settlement units lying, in size and complexity, somewhere between the lower and upper level settlement.

Upper Level Settlement. With upper level settlement one is propelled into the realm of Bullard's (1960) "major centres". To echo Ashmore (1981b:51), most Mayanists would agree as to what does or does not constitute a "major centre". That is not to say that a great deal of variability does not exist at this level. Whether this variability is contained within vague hierarchical classifications such as "small major ceremonial centre", "medium major ceremonial centre", and "regional ceremonial centre" (Hammond 1975a 42-43), or more complex schemes such as "regal-ritual city", "regal-ritual centre", and "regal-ritual residence" (Ball and Taschek 1991), it is still understood that one is dealing with variations on a theme (see Ashmore 1992). If one considers the appearance of certain site traits, as they were discussed in the previous

sections, it becomes evident that upper level settlements will exhibit all of these features. The general characteristics of upper level settlement units are. increased size (spatial and volumetric), increased complexity of plan (i.e., further separation of residential, public/administrative, and religious sectors), increased number of non-residential structures, increased presence of ballcourts, stelae, altars, *sacbeob* (causeways), and vaulted buildings. What differentiates upper level settlements, with reference to surface features, are degrees of quality and quantity. As Ball and Taschek (1991.157) have argued, "what distinguished Tikal from other centres was the greater incidence of certain activities and their occurrence on a grander scale than was true elsewhere." The point being, although many sites exhibit special features, such as the twin pyramid complexes at Tikal and Yaxha (see Ashmore 1981b:58, 1992), all upper level settlement, with few exceptions (e.g. Lubaantun), share a core list of traits (see Ashmore 1981b:57-58; 1992). The differences in quality and quantity suggest differences in power, and hence ranking of upper level settlement is a possible (e g. Ball and Taschek 1991; Marcus 1976), although by no means a simple undertaking (see Ashmore 1981b:55). As with the rest of the settlement continuum, there are potentially numerous, highly variable developmental trajectories manifest within sites of this level. However, no matter how small or large, upper level settlement units share more characteristics with each other than they do with middle level settlement.

Middle Level Settlement Units and Problems in Settlement Archaeology

Having summarised what constitutes "middle level settlement", I now wish to discuss in more detail the problem at hand. The following arguments will stress how settlement archaeology, and the overall process of interpretation, have failed to produce an adequate understanding of this settlement level. In the subsequent section I will outline how this lack of knowledge has inhibited our ability to characterise ancient Maya social organisation. It is the upper portion of the middle level settlement, those sites previously designated "minor centres", which are of specific interest here, although the criticisms are equally valid for middle level settlement in its entirety.

Problem 1. A review of the literature indicates that middle level settlement constitutes the least investigated segment of the ancient Maya settlement hierarchy (see comments in Ashmore 1981b:58-59; Fash 1983; McAnany 1995.91; Webster 1980:844;

Willey et al. 1965:581; but see work done by Ball and Taschek 1986:27-40, 1991:158; Chase and Chase, in Wilford 1993; Coe and Coe 1956; Conlon 1992, 1993, 1995; Conlon and Awe 1991; Fry 1969; Garber et al. 1994; Green 1970; Haviland 1981; Hendon 1991; Leventhal 1981; McAnany 1995; Willey and Leventhal 1979). As previously discussed, this is a direct consequence of settlement archaeology's polar bias (i.e., the clear focus on housemound [lower level settlement] and major centre [upper level settlement] investigations). Clearly, an influx of data generated through exploration of middle level sites is required to round out the present data base (see McAnany 1995.122).

Problem 2. It is all too evident, even taking into consideration the recent increase in lower level settlement research, that outside of the upper level settlement units (i.e., major centres) investigations have all too often included only minimal excavations (see comments in Ashmore 1981b:61-62; Chang 1983:373-374; Freidel and Sabloff 1984:36; de Montmollin 1989:74; Haviland 1966b:43, 1981:90; Hendon 1992; Leventhal 1981:206-208; McAnany 1995; Pyburn 1989:13, 38; Rice and Puleston 1981:137, 155; Willey and Leventhal 1981:75-76). This becomes especially clear when the past process of minor centre classification and analysis is reviewed (see above), with its blatant stress on *surface features*, in particular site size, spatial location, and architectural characteristics (e.g. Ball and Taschek 1991; Borhegyi 1956:105; Bullard 1960; Culbert 1974:67; de Montmollin 1989; Ford 1981:57; Fry 1969:248-249; Garber et al. 1993a:6; Green 1970; Hammond 1975a:4, 1975b:113-114; 1982:168; Leventhal 1981.206-207; Marcus 1983:469; Puleston 1983:2, 25; Sanders 1960; Thomas 1981; Tourtellot 1970; Willey 1956a, 1956b; Willey 1981:391; Willey and Bullard 1965:368; Willey et al. 1965).

On the most basic level, the highly variable agglomeration of minor centres has been interpreted by emphasising the multifaceted excavation and survey data gathered from the investigation of upper and lower level settlement, with little influx of data from the minor centres themselves (see also McAnany 1995.152). A strong argument can be made that due to their position in the middle ground of Maya settlement, minor centres and other middle level settlement units are potentially the most variable with regard to social relations, and hence site "function" (Haviland 1981:117; Puleston 1983:25; Rice and Puleston 1981:155; see also comments in Ashmore 1981b:54-55; Culbert 1991:328; McAnany 1995 122; Pyburn 1989:35) This notion is reaffirmed by the overall surface

variability, a variability which would be undoubtedly enhanced by excavations (for general discussions of settlement variability see Culbert 1991:328; Ford 1981:57; Fry 1969; Harrison 1981.269; Kurjack 1974.93, 95, Leventhal 1981.206; McAnany 1995:158; Puleston 1983:81; Thomas 1981:105-109, Willey 1981.391-392). It is readily apparent that the recognition of variation in these settlement units, and hence social relations, is impaired by this lack of excavation, and the use of uncritical classification and interpretative schemes. As has been made clear by Bawden (1982.181) "those research projects that attempt to reconstruct prehistoric social systems primarily through examination and interpretation of corporate architecture and simple identification of settlement composition can only gain superficial understanding of the structural patterns that prevailed within those settlements."

Problem 3. Given the limited extent of minor centre excavations, it is important to stress that the minor centre data base is also biased towards the synchronic scale (see comments in Ashmore 1981b:62; Fry 1969:61; Rice and Puleston 1981:155). Again, this reflects the Mayanist's penchant for formulating models of social organisation based solely on surface architectural features. This synchronic bias is especially consequential, given that the investigation of social relationships is best served by a diachronic analysis (see Bourdieu 1977; Cohen 1978:270; Giddens 1979:53-55; Gosden 1994; McAnany 1995:16, 144; McGuire 1992; Shanks and Tilley 1992; Wason 1994, in contrast to Webster 1980:844). Analyses which rely solely on surface architecture and related features reify static models for ancient Maya social relations. It is apparent that this emphasis on surface reconnaissance at the expensive of excavations masks the developmental variability inherent in the settlement hierarchy, especially within the middle level of settlement (see comments in Fry 1969:123, 256; McAnany 1995:122; Pyburn 1989:38, Rice and Puleston 1981:155). These surface features must be seen as the *end result* of past, dynamic social interaction, rather than a fossilised text of a static social system. Static models are prevalent in the interpretation of minor centres, and will continue to be so until multifaceted, diachronic data is produced through excavations.

Problem 4. On a more abstract level, although the limitations of the data remain the same, minor centres have been interpreted through the application of analogies and more general interpretative schemes (i.e , feudal models, central place theory, ethnohistoric and/or ethnographic models: e g. Adams and Smith 1981, Ball and Taschek 1986, 1991; Borhegyi 1956:105; Bullard 1964; Culbert 1974.67-68; Hammond

1975b:113-114, 1982:168, Leventhal 1983:73-75; Marcus 1983:469; Thomas 1981:108-109, Vogt 1964, 1968, Willey and Bullard 1965; Willey et al 1955:24) Once again, this has led to the a priori interpretation of these settlement units, whereby size, morphology, and spatial location data from an uncritically amalgamated cluster of "minor centres" (i.e., little if any effort having been made to emphasise differences) are combined unimaginatively with the expectations of overarching models (see also comments in Kowalewski et al. 1992:259, 264; Sabloff 1983). The use of analogies is always problematic, especially when such analogies are applied in an uncritical, formal manner, rather than in a relational way (Hodder 1983:16; see also Wylie 1985:95). Some analogies are additionally problematic, particularly those constructed from ethnohistoric or ethnographic Maya examples, because they again promote static models for ancient Maya social relations. Applied uncritically, these interpretative constructs tell us little about the ancient Maya example under investigation.

Problem 5. Within the study of ancient Maya settlement "functional labels...abound" (Ashmore 1981b:41), and there is a general tendency towards implicit "functional" interpretation. This is more problematic within the analyses of minor centres and other middle level settlements, because the lack of actual data from these sites has forced researchers to assign static functions at the expense of elucidating developmental variability. Minor centres are perceived to have played a variety of roles within the ancient Maya socio-economic, socio-political, or socio-religious hierarchies. They have variously been interpreted as having been the uninhabited loci for small community religious activity (Coe and Coe 1956:381; Willey 1956a:778), the focal point for a variety of community activities (Borhegyi 1956:105), or as boundary sites for the "maintenance of co-operative relationships" between neighbouring major centres (Garber et al. 1993a 6). In discussing these small centres, most ascribe them a multifaceted function within the larger hierarchy of interaction, a function which includes residential, economic, political, religious, and social aspects (Ball and Taschek 1991:158; Bullard 1960:368, 1964; Culbert 1974 67, Hammond 1975a:41-42, 1975b 113-114, 1982:168; Marcus 1983.469; Puleston 1983:25; Rice and Puleston 1981:143; Thomas 1981:108, Tourtellot 1970:410, Willey and Bullard 1965:369; Willey et al 1955.25; Willey et al. 1965.579). Such a broad province may be fitting for these sites. However, it is problematic that such a scopious interpretation glosses over differences between the sites, and in the end does not facilitate the recognition of developmental distinctions

Ashmore (1981:41) has stated that "the pivotal problem is the lack of a strict one-to-one correspondence between forms and functions· some activities may be carried out via a formally varied set of features, and many features serve multiple functions." As Haviland (1981:117) has stressed, in his discussion of "minor centres" in the vicinity of Tikal, "it looks very much as if structures of similar size, architecture, and arrangement could serve quite different purposes." Puleston (1983:25) voices similar concerns for the Tikal sample, noting that within the minor centre assemblage there are "almost as many different plans as there are sites." He suggests that the overall variation in plan and distance from the Tikal site core suggest that sites of this type may have exhibited very different functions. By ascribing a static, functional role to these sites, no matter how broad, we gain little understanding of the ever-changing socio-economic and socio-political milieu that constituted ancient Maya social organisation.

This problem becomes evident when one reviews the few attempts that have been made to move from function to social organisation. In a 1983 article, following the Wenner-Gren conference in honor of Gordon R. Willey, Fash (1983:262) succinctly described the problems participants had in ascribing a role to "minor centers". He pointed out that:

> "there was no clear consensus on the universality of the cluster or on how these groupings related to each other or to larger polities of which they may have formed a part. How were the minimum residential units and group residential households grouped together? Were these clusters somehow representative of a higher level of social organization? Was there a consistent pattern of clusters?"

This quagmire is reflected in the variety of interpretations presented for the role of minor centers within reconstructions of ancient Maya social organization. Some see minor centres as the home of a local elite or "rural nobility" (Bullard 1960.360, Adams and Smith 1981:343-347; Conlon 1995; Hammond 1982:168, Willey 1981:399; Willey and Bullard 1965:369 1965:369, Willey and Leventhal 1979) Others argue for the presence of middle class inhabitants (Culbert 1974.67). Still others suggest the presence of non-elite, non-middle class, multifamily households (McAnany 1995) Some have even postulated that deposed rulers resided within these settlements (Haviland 1981). These interpretations are not necessarily contradictory, given the potential developmental

trajectories expressed within these sites They only attest to the myriad of past social relationships which were potentially played out within this settlement level Settlement archaeology's inability to elucidate and assess accurately the variability within the middle settlement level has inextricably hindered our understanding of ancient Maya social organisation. The focus will now shift to this topic in order to thoroughly emphasis the importance and need for full scale archaeological study of the middle settlement level.

PROBLEMS IN THE STUDY OF ANCIENT MAYA SOCIAL ORGANISATION

> *...the multiclass model [is] the best current description of [the] ancient Maya...*[Sharer, in Morley et al. 1983:226, emphasis mine].

> *On the strength of an overwhelming assemblage of evidence from archaeological, art-historical, epigraphic, and ethnohistoric sources, modern scholars are in near-universal agreement that Classic Maya society was stratified into two basic classes - termed here the elite and non-elite* [Sharer 1994:489-490; emphasis mine].

These two contradictory statements, both written by the same author, clearly indicate that Mayanists are apt to radically alter their position on ancient Maya social organisation. There is undoubtedly more confusion than consensus. In reality, the most disparate models have been advanced, some so diametrically opposed it is difficult to comprehend that the authors are talking about the same people. Ultimately, these contrasting opinions reflect the variability inherent in the settlement data base, and the lack of understanding thereof. As many authors have indicated, much of the previously discussed settlement variability is attributable to social factors. Freidel (1981:373-374) has indicated that the dispersed settlement pattern exhibited by the Maya is not a result of the practice of swidden agriculture, as has previously been argued, but rather "there are now grounds for suggesting that the residential dispersion typical of complex Maya communities at the height of their civilisation was determined by social and cultural institutions." McAnany (1995.158) has noted that "the variability in residential structure, to my mind, is a function of several variables, but predominant among them is the fact that architecture is expressive of social structure." Even those more closely aligned with

cultural ecology draw similar conclusions. For example, Sanders (1981:354) has pointed out that "much of the variety one sees in settlement typology is the product of cultural factors, primarily the institutional aspects of culture."

Trigger (1980:161) has argued that if Willey is the "father" of settlement archaeology, he must also be considered the patriarch of social organisation research, at least in archaeology. From the outset, Willey (1953:1) saw settlement archaeology as a means to begin illuminating the "various institutions of social action and control which culture maintained." To reiterate, the underscoring of this objective can be traced back to the original "Viru discussions", wherein Julian Steward stressed that through settlement pattern studies archaeologists could begin to address "the non-material and organisational aspects of prehistoric societies through the study of habitation and settlement type" (Willey 1953:xviii). Thus, settlement archaeology and the construction of models of social organisation are so closely aligned as to be considered two stages in the same endeavour. The preceding and forthcoming discussions are associated, therefore, by more than just design. The two topics are inextricably linked. In order to provide an accurate assessment of ancient Maya social organisation I wish to begin by summarising, in a critical manner, the various models which have been forwarded. As will be seen, most of these models present a static view of ancient Maya society, focusing as they do on the Classic Period (250-900 A.D.). In Chapter 2, I will advance what I think is a more realistic formulation for archaeological analysis.

"The Egalitarian Model"

The first, and least popular, model for social organisation suggests that the ancient Maya employed a "cargo system" of rotating religious positions, and as a result there was a limited gulf between the "elite" and "commoner" segments of the population (see Bullard 1960; Vogt 1961, 1964, 1968, 1969, 1983a; Vogt and Cancian 1970; Willey 1956a; Willey and Bullard 1965.375, Willey et al. 1965:580; see also Bullard 1964:283-284). Within this model the settlement and social organisation displayed by the contemporary Highland Maya of Zinacantan, Chiapas is considered to correlate with that of the ancient Maya (see Vogt 1964 317). As Vogt (1964.308) summarises: "these cargos were filled on an annual basis with the cargo-holders moving with their families into the ceremonial centre [major centre] to live during their terms in office, then

returning to their parajes [minor centre with surrounding settlement] to farm corn during the rest periods between cargos." Administrative positions were also considered to have been rotating, as "...two *krinsupales* (principales) are selected each year from each paraje to represent the *presidente*...[and]...carry out orders in the ceremonial centre" (Vogt 1964:311). Thus, in its most basic form, this model implies that the ceremonial, or major centre was occupied by an ever-changing aggregate of religious and administrative officials and their retinues. Parajes, or minor centres and surrounding settlement, are considered the permanent residential locus for these individuals. A number of features specific to the cargo system (e.g., positions are open to all, positions are temporary, no material gain is acquired by the participants), have led to this model being labelled the "egalitarian model" (Becker 1979a; A. Chase 1992:31; Iannone 1994b; Morley et al. 1983:225). However, the term egalitarian does misrepresent this construct somewhat, as is attested by the following statement by Vogt:

> I would suggest that the early Maya may have also organised at least some orders in their priestly hierarchies in the ceremonial centres by means of some kind of system of rotation in office, with men from certain lineages coming in from the outlying hamlets to serve a year in cargo positions and then returning to corn farming while they awaited service in the next higher position in a system of graded ranks [Vogt 1968:167; emphasis mine].

Vogt (1983a:100) is careful to note that he "never stated in print that the Maya are in any sense of the word 'democratic' or 'egalitarian'." He stressed that "I have tried to make clear that I have never encountered a more rank-conscious people than the contemporary Maya among whom I work in Chiapas." The confusion lay in some of Vogt's earlier statements, where he seems to begrudgingly accept the presence of priests as permanent inhabitants in the larger centres during the Late Classic period (Vogt 1968:167), or where he stresses that the outgoing cargo officials return "to their parajes to farm corn" (Vogt 1964.308). He was to admit later that the Maya did have an "elite", and he appears, reluctantly, to accept that these "rulers" and their retinues resided in the "important" centres, alongside rotating cargo officials and "permanent specialists" such as scribes, astronomers, and musicians (Vogt 1983a 101-103). Recent discussions of the contemporary cargo system have also been more explicit in their attribution of rank

differences. In particular, Hayden and Gargett (1990) were able to show that the cargo system could be manipulated to the advantage of certain individuals, especially during times of crisis (see also Haviland 1966a.628-630). In modified form it would again appear that the rotating officials derived from the more important lineages in the paraje, and thus the "minor centres". It would follow, therefore, that the variation within the middle level of settlement was a result of differing levels of success within the cargo system. However, these observations are not explicit in Vogt's writings.

Critical Summary. A number of factors argue against the utility of this explanation. When Vogt (1968:167) states "that there was less of a gulf between the peasants farming corn in the hinterland and the priests in the ceremonial centre than has previously supposed", he is clearly wrong. So are the archaeologists such as Willey (1956a:777), who, using archaeological data, argue for a similar tight-knit society. The latter, seemingly compatible archaeological insights were often derived from the analysis of a limited segment of the settlement continuum (e.g lower level settlement). As Bullard (1964:286) has argued:

> Conceivably a rotating system of office, such as Vogt describes for Zinacantan, was a factor in the integration of their society Nevertheless, undeniable evidence exists for high politico-religious status, comparable to royalty, for some individuals, and the complexity of such intellectual attainments as the calendrical knowledge implies long training and a greater specialisation than one would expect from a part-time priesthood.

More recently, Sharer (in Morley et al. 1983:225) has reaffirmed this notion, stating that "the archaeological data are too laden with evidence of differences in wealth and status, as well as indications of sizeable and permanent occupation within centres, to lend support to the egalitarian model, except perhaps for the lower echelons of authority."

It is also problematic that the ethnographic data which provides the foundation for this model derives from the study of groups separated from the Classic period Maya by a time span of over 1000 years. Significant changes in social organisation must have occurred in that time (Haviland 1968:95-96, 114), especially considering the apparent cultural "realignment" that took place near the end the 8th century A.D. (see various papers in Culbert 1973), and the Spanish intrusions into the Maya realm starting in the

16th century. It should be stressed that the social organisation studied by ethnographers may stem as much from Spanish influence as it does from its more pristine Maya roots (A. Chase 1992:31; McAnany 1995:162; Price 1974.461; Willey 1983:453). Vogt (1969:143) himself has stated that "the Spanish conquest in the 16th century, and subsequent developments during the 17th, 18th, and 19th centuries did have an important impact on the indian cultures of the region." Freidel (1981:377) has stressed that "...analogies to modern cargo hierarchies are strained because important features of pre-Columbian Maya elite organisation were deliberately destroyed in the course of conquest." Similarly, Farriss (1984:164-165) has suggested that a significant "compression and simplification of the social order" resulted from contact with the Spanish. As she effectively argues:

> The great territorial magnates were not only reduced to community *batabs* [heads of towns]. They and the rest of the aristocracy were deprived of the spoils of war and the profits of long-distance trade, and the slaves they had owned were set free to join the ranks of ordinary *macehuales* [commoners]. The Spanish also siphoned off the major share of the surplus wealth that *macehual* labour produced in the form of tribute goods and labour drafts, which had formerly gone entirely for the support of the native elites...the levelling process failed to close the gap between nobles and commoners completely. It was, however, significantly reduced, and the intermediate groups of professional warriors and artisans disappeared altogether [Farriss 1984:165].

These two points significantly erode the explanatory potential of the "egalitarian" model. The narrow "gulf" between the upper and lower segments of society recognised by Vogt (and promoted by Willey) reflects the "compression and simplification" process outlined by Farriss. As Willey (1990.328-329) was to concede later:

> "...the social 'gulf' between a ruling elite and a sustaining peasantry had been [under]emphasized...While it is true that many of the occupants of the Lowland Maya 'house mounds' appeared prosperous and participative in ritual aspects of elite culture - as such things can be measured by household and burial goods - there was certainly significant differences between elite and commoner."

Thus, one of the fundamental tenets of the model can be brought into question, that being the overly simplistic characterisation of ancient Maya society as having had a limited gulf between "elite" and "commoners". Coupled with the problem of time span and Spanish influence, it is evident that the "egalitarian" model cannot be applied directly to the ancient Maya without modification (Willey 1983:453). Similarly, Farriss' (1984:165) suggestion that an "intermediate" group completely disappeared as a result of "compression and simplification" during the ethnohistoric period implies that the existence of such a group should be worked into any model of *ancient* Maya social organisation.

In light of the aforementioned criticisms, a number of individuals have offered modified models with many similarities to the one previously discussed (e.g. Bullard 1964:286; Culbert 1974:66; Demarest 1992:153; Haviland 1966a:629-630; Vogt 1983a). These take into consideration the fact that the Maya centres were probably inhabited by dynastic lineages, and simply attempt to leave open the possibility that some lower level officials rotated on a cargo system basis. These models are therefore more closely related to the two-class models summarised below. One particular construct, the "pilgrimage fair" model proposed by Freidel (1981), is more closely related to Vogt's work (A. Chase 1992:31), although others have classified it as a two-class, feudal-type model (Willey 1981:412-413). Within this model "all Maya centres functioned as pilgrimage shrines, way stations, or termini in a pan-Maya network" (Freidel 1981:378). According to Freidel, these centres were the loci for the "public festivities" which functioned to integrate local communities and entrench them within "the larger regional network." Freidel (1981:380) offers a developmental model, whereby shrines originally dedicated to local community deities (as opposed to their having been "household" or "family" shrines) eventually evolve into important nodes within the larger regional network He suggests that it was not until the Classic period that Maya centres began to be occupied by "small numbers of people " With reference to this shift in occupation, Freidel argues that "if the activities of centres were by definition sacred and those of the home profane, the occupation of centres by elite members of society would involve a reversal of cultural norms that is often associated with high-status groups undergoing sanctification."

Seeing as Freidel attributes a religious function to centres, and perceives them to have only seen minimal occupation prior to the Classic period (when the elite were

attempting to sanctify their distinct social position), the pilgrimage fair model has much in common with the "egalitarian" model proposed by Vogt This commonality is lent credence by the fact that a number of egalitarian characteristics are readily recognisable within the model (see Freidel 1981.379). Like the "egalitarian" model, the pilgrimage fair model would assign religious roles to all centres Major centres would be the most important religious, and possibly economic (markets), nodes within the broader regional network, with minor centres acting more regularly as community shrines. Later, during the Classic period, the larger, regional shrines begin to function simultaneously as habitations for elite members of society. Thus, the social organisation during the Classic period would be more akin to the noble/commoner constructs discussed below. One matter which needs to be proven is that the centres *were* uninhabited prior to the Classic period. Also, more work needs to be done in order to assess whether distinctions can be made between "family" shrines and "community" shrines, particularly within the middle settlement level. This model is an improvement on the basic "egalitarian" model, however, as it is developmental and allows therefore for change in centre function over time.

The Two-Class Models

The Priest/Peasant Construct. The major exponent of the second model was J.E.S. Thompson (1927, 1931, 1942, 1954, 1966, 1970; see also Brainerd 1954, 1956; Bullard 1960; W. Coe 1959; Kidder [in A. Smith 1950]; Ricketson and Ricketson 1937; Satterthwaite 1937b; Smith et al. 1963; Thomas 1899; Willey 1956a, 1956b; Willey and Bullard 1956, 1965; Willey and Smith 1963, 1969; and critiques in Becker 1973, 1979a, 1979b). In typical form, he dismissed the egalitarian model by stating: "that the ancient Maya city was essentially a democratic organisation is a pleasant thought especially to Americans whose faith in the general acceptance of democratic institutions by non-Europeans has been so rudely shattered in recent years, but I doubt its validity" (Thompson 1966:91). In its preliminary "Thompsonian" form, the two-class model presents a society with well defined priestly and peasant classes. It should be stated, following Becker (1979a), that Thompson's scholarly publications never discussed this model, it was proliferated solely through his "popular" works. Thompson's (1927:24) notion of the priest/peasant dichotomy was articulated most clearly in the following

statement: "on the one side stood the priests who formed the educated class, on the other the uneducated masses. The differences between the speculative and esoteric doctrines of the former and simple beliefs of the latter must have been great." Thompson (1931:334) conceived of the larger Maya centres as being purely religious or ceremonial in nature, rather than as proper cities He did, however, also ascribe market and judicial functions in some discussions (Thompson's 1942:12-13). According to Becker (1979a:32-33), this interpretation probably derives from Thompson's belief in a priest/peasant model, rather than the converse. These centres were thus interpreted as the loci for priestly activity, and were thought to have housed only priests and their retainers. The remainder of society, the peasants, would have inhabited the less complex architectural compounds scattered across the landscape. Maya society was thus a theocracy (Hammond 1982:179; Morley et al. 1983:226).

Critical Summary. The priest/peasant model is problematic for a number of reasons. First, the model does not fit what is known ethnohistorically or ethnographically about the Maya (Vogt 1983a:100). It also does not fit archaeologically (see Becker 1979a:32). Thompson's ideas conformed to, and in reality provided the template for, a generally outmoded view of the Maya. In summary, advocates of this perspective argued that the ancient Maya centres were mainly vacant, being inhabited only by a limited star-gazing priesthood. It was these priests who were depicted on the numerous stelae monuments, and who were supported by the simplistic slash-and-burn agricultural system of a rural peasantry. The writing system was considered to record the celestial pursuits of the priesthood. Subsequent research has proven all of these assumptions incorrect. It is clear that the ancient Maya centres were occupied by large, heterogeneous populations (e.g. D. Chase et al. 1990; Harrison 1970; Haviland 1970), that the subsistence system was much more intensive than previously thought (e.g. Harrison and Turner 1978), that the monuments depicted "rulers", and that the writing system therefore detailed the histories of ruling lineages and dynasties (e.g. Proskouriakoff 1960, 1961).

In retrospect, it is probable that many of Thompson's perceptions concerning the ancient Maya may have been clouded by his having grown up in Britain, with its large cathedral and church complexes. Thompson may have unknowingly transposed his Eurocentric view of this type of architectural cluster directly on to the ancient Maya centres (see also Becker 1979a:31-32, 1979b). Becker (1979a:36) has also suggested

that Thompson's "concepts of social class derive more from English social structure and Bolshevik history than from any ethnographic or archaeological evidence." A final word on Thompson's views can be given to Coe (in Schele and Miller 1986 2), who has concluded that "there are passages in his great work, *Maya Hieroglyphic Writing* [Thompson 1950]..., which suggest that he thought of the Classic Maya as Anglican like himself, chanting antiphonal Psalms in the quiet calm of an Evensong service."

Segmentary State Models. More recently the priest/peasant dichotomy has been transformed into the noble (elite)/commoner construct by advocates of a basic two-class model (Folan 1983, Folan et al. 1982; Kintz 1983a:162-163; Leventhal 1981:206-207; Leventhal et al. 1987:179; Marcus 1983:469-470, 1992:221-226, 1993a:115; Roys 1972 [1943], 1957; 1965; Sanders 1992:280; Sanders and Price 1968; see also Thompson 1966:93), although many of the basic tenets remain the same. The two factors which were instrumental in the shift from the priest/peasant model to the various segmentary state models have been discussed above: (1) the recognition that the ancient Maya practised intensive agriculture (e.g. Adams and Smith 1981:337; Hamblin 1984; Harrison and Turner 1978; Pohl 1990; see various papers in Flannery 1982; Harrison and Turner 1978); and (2) Proskouriakoff's (1960, 1961) postulation that the Piedras Negras stelae outlined the history of a ruling lineage. The latter indicated that the ancient Maya had rulers, or "kings", as well as priests. The former implied that a larger population could have been sustained, that surpluses were possible, and that higher degrees of managerial influence were required. In combination, these new findings significantly challenged the explanatory potential of a simplistic priest/peasant model. Following Arlen Chase (1992:31-32), a number of models can be included within a discussion of the modified two-class perspective. These include segmentary state, feudal, and galactic polity models, most of which derive from analogies originating outside the New World. Also classifiable as two-class models are those drawn primarily from the ethnohistoric record.

A detailed segmentary state model has recently been applied to the Maya case by Ball and Taschek (1986, 1991). According to them, many of the other two-class constructs which have been offered to describe ancient Maya social organisation (e.g feudal models, galactic polities, theater states, patron-client states [see below]) can be classified as "segmentary state" models (Ball and Taschek 1991:160). They argue that the term "segmentary state" is more applicable, as it does not carry with it all the connotations inherent in the "more specific labels" or "loaded terminologies". Ball and

Taschek (1991:161) are also careful to note that although all feudal and galactic polity constructs are segmentary state models, the opposite is not true. Other forms of segmentary states fail to exhibit certain characteristics of the feudal or galactic polity types. According to Ball and Taschek (1991:160) "the fundamental essence of the segmentary state lies not merely in a redundant diffusion of power and political authority throughout the societal system, but in the ritual importance of the local lord and centre in such polities." In their analysis of the upper Belize River valley Ball and Taschek (1991:156-157) employ a modified model adopted from Richard Fox (1977). Within this formulation five components of the segmentary state are articulated with five site types. These five settlement units are: (1) the regal-ritual city; (2) the regal-ritual centre; (3) the regal-residential centre; (4) the villa or manor (plaza group); and (5), the headman's residential compound (plazuela group). The upper three categories (regal-ritual city, regal-ritual centre, and regal-ritual residence) are all upper level settlement units (major centres). They are ranked based on the "relative scales of the client populations attendant on and serviced by [each]" (Ball and Taschek 1991:158). As follows in the segmentary state model, "the precise functional emphasis may have varied from site to site, but the primary differences separating these centres involved the scale and frequency of the same restricted set of activities rather than any meaningful variations involving or numbers of different activities occurring" (Ball and Taschek 1991:157).

Within the Ball and Taschek model minor centres are labelled "plaza groups" (also villas or manors). These settlement units are considered to have housed a "hereditary nobility of lower tier elite below the level of immediate members of the ruler's family" (Ball and Taschek 1991:158). Ball and Taschek also feel it likely that the nobility inhabiting the minor centres served "formal managerial or adjudicative" functions. According to Ball and Taschek (1991.157) retainer households are often found in proximity to these minor centres. They conclude that "...at the plaza group [minor centre] level, we once again find elevated-status, residential, funerary, ceremonial, and public access elements, although on significantly smaller scales, suggesting their association with far smaller client audiences" (Ball and Taschek 1991 158). Below this, some of the settlement units situated in the grey area between lower and middle level settlement (e.g. plazuelas) are interpreted by Ball and Taschek as the homes of headmen. Unfortunately, they do not elaborate on this matter. Although the segmentary state model is an attractive one, much remains to be proven. As Ball and Taschek conclude,

in their discussion of the role of minor centres "just what that role or the basis for it might have been remains to be determined, as does the sociofunctional relationships of the plaza group's [minor centre] residents to the major centre and palace complexes."

Various feudal models have been advanced in which ancient Maya society is perceived to have been divided into a land-holding noble class and a land-working commoner class (Adams 1983, Adams and Smith 1981; Leventhal 1981:206-207; Sanders 1976, 1981; Willey 1980:261, 1981:410-413; see also A. Chase and D. Chase 1992:9; Koenig and Williams 1985:259; Wilk 1988). Adams and Smith (1981:336-337) and Willey (1981:409) have outlined the following characteristics of feudal society:

> (1) political power and authority are diffused amongst a "chiefly" or "noble" class.
> (2) this power and authority is ranked by horizontal kinship ties and vertical obligations.
> (3) power, authority, land, and other property are passed on through hereditary lines.
> (4) the ownership of agricultural land determines wealth, authority and status.
> (5) agricultural lands are worked by individuals other than the landowners.
> (6) these agricultural lands produce a surplus.
> (7) this surplus is controlled by the "land-owning elite".
> (8) the "elite" and the surplus may be small.

Advocates of the feudal model generally employ Old World analogies, but do cite ethnographic, ethnohistoric, epigraphic, and archaeological evidence from the Maya area which appears to support the applicability of these constructs (see Adams and Smith 1981:337-342; Willey 1981:409) However, it must be stressed that although the basic principles of the feudal models may seem applicable to the Maya example, there is some debate as to which feudal model is the best fit.

Some researchers argue for a "kings court" model, wherein a handful of the largest major centres were the homes of the kings and their court, and the rest of the countryside was inhabited by a mobile, "provincial" elite (Adams and Smith 1981.343-347, see also Willey 1981:410). Within this construct it is assumed that members of the provincial elite may have taken-up part-time residence within the larger

major centres during times of religious activity, or for business matters. Generally, however, they were to be found inhabiting the smaller major centres and the minor centres scattered across the landscape. The differential size and complexity of the settlement units within the upper and middle levels of settlement is explained by the ranking of this provincial elite (see Adams and Smith 1981 344-346) It is also suggested that both the "rulers" and the provincial elite had a number of seats of power, and rotated between them on a regular basis so as "not to deplete the material resources of a single region" (Adams and Smith 1981:343). "Together, the royal and provincial elites can be regarded as the elite class proper, or nobility" (Adams and Smith 1981:346). Following this model, commoners, or more accurately agricultural labourers, would have resided in the various housemounds and housemound clusters which constitute lower level settlement (Adams and Smith 1981:347). Interestingly, Adams and Smith (1981:346-347) do suggest that a middle stratum of individuals, a "gentry" or "squirearchy", existed between the noble and agricultural/commoner classes. This observation is important, and will be dealt with in some detail below. Needless to say, the presence of such a group rules out the validity of a simplistic two-class model.

Other advocates of Old World feudal models, mainly those who employ African examples, argue for a two-class, "patron-client" model (Sanders 1981:367). Within such a construct the king "theoretically" owns all the land, but as Sanders points out "in reality land ownership was vested in the local extended family or lineage group." Sanders argues that in order to control "surplus goods and services" effectively, as well as "co-ordinate administration", "production", and "extract taxes", the king assigns "stewardships" over the land. These "stewards" or "clients" can be commoners, as well as lesser members of the royal lineage. According to Sanders, the more prominent members of the ruling lineage were rarely given such stewardships, a practice which inhibited this segment of the nobility from acquiring "too much power." Sanders notes that although the clients were ranked, mainly by the size of the jurisdiction granted them by the king, each was personally accountable only to the king Each client may in turn grant local stewardships under their own authority, from which they receive in return surplus production, services, and extract taxes, not unlike their own relationship with the king. This model, as Sanders points out, creates a continuum of clientage positions, and as a result, one would expect a continuum of archaeological sites. Adams and Smith (1981.342) state that within a clientage model it is held that the king, and possibly

members of the kings family, as well as a number of secondary elite (e.g. retainers, administrators), body guards, and a large military attachment, would have inhabited the major centres. Following this argument, the minor centres, and other middle level settlement units, would appear to have housed those clients of commoner and lesser nobility status who had obtained stewardships from the king Potentially, the plazuelas were the residences of the local clients. In their review of the clientage model, Adams and Smith (1981:342) argue that "the elaborate system of religious sanctions and kinship interrelationships known from textual sources to characterise the Maya elite does not accord well with the feudal clientage model." This criticism aside, the clientage model will remain difficult to test without textual evidence testifying to the granting of clientage positions.

A further segmentary state model which has been applied to the Maya example is that of the "galactic polity". This analogy is based on anthropological work in Southeast Asia (e.g. Geertz 1980; Tambiah 1977). Demarest (1992) has been the most vocal advocate of this model for ancient Maya social organisation (but see also Coe 1957; Sharer 1994:510-512). According to Demarest (1992:150), galactic states are characterised by:

(1) large centres constructed on a cosmological model.
(2) a cosmological origin and role for the ruler.
(3) an emphasis on performative ritual within the centres (with the ruler as primary performer).
(4) a loose organisation of "capital" centres, each surrounded by a number of subordinate "satellite" sites.
(5) a high degree of structural and functional redundancy between the centres and the satellites.
(6) rather than stressing the control of land or territory, as in the feudal models, the emphasis is on the command of labour.
(7) rulers have very limited firsthand control "over local economic infrastructures".
(8) "an extreme dependency on the personal performance of the ruler in warfare, marriage alliances, and above all ritual".

(9) a continual expansion and contraction of the state as centres and satellites struggle against each other and amongst themselves.

Although it is not explicit, it would appear that this is basically a two class system, with nobles and commoners. The nobility was represented by a series of local and regional rulers. As Demarest (1992:151) notes "the rulers of each subordinate centre also had their own claims to divine authority." He also postulates that many of the local rulers may have rotated in and out of the king's court in positions similar to that outlined by Vogt for the contemporary Maya cargo system (see Demarest 1992:153). This model would argue for a nested series of centres, with the minor centres being satellite sites. Minor centres would thus function as the homes of local rulers, who may have potentially taken up rotating offices within the larger centres at given points in time. That structural and functional replication are fundamental to the model suggests that similar social activities were carried out at minor centres and major centres, the only real differences being degrees of overall performative capabilities. Unfortunately, the variation inherent in the middle level of settlement does not suggest *complete* structural and functional replication. Although some minor centres appear to be replicas of major centres (i.e., the site features suggest that similar social relations were played out at this level), others do not. Thus, a fundamental issue of contention rules out the outright adoption of this analogy.

Critical Summary. It is often the case that the segmentary state models are applied with only limited reference to the archaeological data. All need to be tested more rigorously using the archaeological record in order to accurately assess their explanatory potential. Specifically, the structural and functional replication required by this construct seems to break down somewhat in the middle level of settlement. Clearly there is some replication, but there is also considerable variability. This suggests a more complex situation than the segmentary state models appear able to account for. With reference to the feudal models, it is problematic that those who have studied feudal systems elsewhere (Old World) stress that they develop after substantial "breakdown in government" (Bloch 1969.82). It is questionable whether this can be proven for the Maya example. If anything, it is more plausible that the feudal characteristics recognised in both the ethnohistoric and ethnographic Maya groups reflect the "confused conditions" following the ninth century realignment (the Classic Period collapse, see D. Chase 1992 119;

Culbert 1973; Miles 1957:778), and for this reason feudal models will be of limited value to the study of pre-ninth century Maya society. In general, it is also difficult to reconcile the feudal models and the galactic polity model, as the former stress the ownership and control of land, whereas the latter sees the control of land as being of minimal importance in comparison to the control of labour. Others have argued that when the archaeological data have been considered in a critical manner, it becomes evident that models such as the segmentary state construct have minimal explanatory value (D. Chase and A. Chase 1992b.308-309; McAnany 1995:147). In addition, it is questionable whether these models even fit the ethnohistoric or ethnographic data (D. Chase and A. Chase 1992b:308, 310; see also Miles 1957:778), or at least the period prior to contact. As Miles (1957:778) states, in her treatise on the contact period Pokom-Maya:

> the antecedents of Pokoman feudal style political institutions bear little resemblance to those of mediaeval Western Europe, excepting for two general features: (1) confused conditions resulting from the breakdown of a classic development, and (2) , which is partially a particular aspect of the first, the vital importance of protection of the producing farmers in an agricultural society with a strong emphasis on class and religious orientation (emphasis mine).

Some of the advocates of the two-class model, particularly those scholars who rely heavily on the ethnohistoric record, argue that Mayanists should simply not borrow these analogies from outside Mesoamerica (Marcus 1983a:470-473, 1992:221-226; 1993a.114-115; Vogt 1983a:104; see also D Chase 1992:118; D. Chase and A. Chase 1992b:307). As Vogt (1983b:11) has questioned: "do, for example, the political and economic systems of feudal Europe, Japan before the Meijii Restoration, the Bunyoro, and the ancestral lowland Maya really have something in common, or are we imposing the European concept of 'feudalism' upon the non-European cases?" He suggests that "we shall discover a more complex and subtle system among the ancient Maya than the model of Kings, dukes, and barons in a ranked nobility" (Vogt 1983a:105). Although one must not rule out the use of cross-cultural analogies completely, as many of the aforementioned scholars appear to have done, it is clear that the content of these analogies must be relational as opposed to just formal (see Hodder 1983·19; Wylie 1985·95) Adams and Smith (1981:335) have recognised this distinction in noting that

"the key to such an approach is to distinguish between formal qualities in specific cultures, the combination of which tends to be unique, and systemic elements, which may be the basis for useful analogies." Unfortunately, as Adams and Smith (1981:347) have admitted "it should be emphasised that the analogy to feudal systems in the case of the Maya depends upon a great number of assumptions that are highly tentative and often questionable." In the end, we need to know much more about the archaeological record, and the variability in the middle level of settlement, before we can accurately assess the explanatory potential of any of the segmentary state models.

Ethnohistoric Models Finally, some scholars have utilized a direct historic approach, employing an ethnohistorically derived, two-class model to describe ancient Maya society (Coe 1965; Fash 1983; Marcus 1983:470, see also Sharer 1994:491-508). These authors rely primarily on Roys' (1967 [1933], 1939, 1972 [1943], 1957, 1965) readings of Landa and other enthohistoric materials. According to Roys (1967:188-191 [1933], 1972.33 [1943]; 1957:5, 1965:662), at the time of contact lowland Maya society was divided into two main classes: "nobles, commoners", with a third slave class being of lesser importance" (see also Farriss 1986:96; Miles 1957:766; but compare with Farris 1984:165). Members of the nobility, who had to be of "renowned descent on both sides of the family," were called the *almehen*. Roys notes that this nobility "monopolised positions of power or authority, including the priesthood." Roys (1957:6-7) indicates that the nobility was comprised of a number of hierarchical positions: (1) the *halach uinic*, or *Ahau* (ruler), and his family; (2) the *batabs*, or *caciques* (renamed after the Spanish arrival) who were the heads of towns, and subordinate to the *halach uinic*; (3) the *nacom*, or war chief; (4) the *ah cuch cabs*, or *principales* (renamed after the Spanish arrival), who were the heads of wards within the towns; (5) the *ah kulels*, who were "deputies" to the *batabs*; and (6) the *holpop*, who was leader of the chief town lineage. Beneath this noble class was the *yalba uinic* ("small man"), or *pizil cah* ("commoner") class, and finally the slave (*ppentac* [male], *munach* [female]) class. Unfortunately, how these various ranks articulate with the ancient Maya settlement pattern has never been explicitly stated. Rather, proponents of this model tend to paint a broad picture of society.

Marcus (1992.221) argues that there were likely various "ranks or categories" within ancient Maya society, but that all of these ranks were subsumed under the two broad classes of noble or commoner. She argues that these are the fundamental societal

divisions because these two groups had "separate descent" (see Marcus 1983.470). With reference to those models which argue for multiple classes or strata (see below), Marcus (1992.221) states that "such reconstructions are inaccurate in light of what is known ethnohistorically," and "as disappointing as it may seem to some of my colleagues, no known Mesoamerican state had more than two strata: an upper stratum of hereditary nobility and a lower stratum of commoners." Marcus concludes that "none of [the] differences in rank and profession ... was as significant as the institution that provided the gulf between the two strata: class endogamy."

Critical Summary. Although Marcus' observations must be carefully considered, it is important to stress that we are in no way certain as to what extent the *Classic period* elite were endogamous (Sharer 1993:94). Similarly, I would like to reiterate that the absence of certain social classes or strata during the Ethnohistoric period does not inevitably rule out their presence during the prehistoric period. It is again significant that the Maya with which the Spanish were in contact were separated from the ancient Maya society under investigation by over 500 years. We must assume that some changes transpired during this time (D. Chase 1992:118), especially considering that a very dramatic societal disturbance occurred in the Maya lowlands around 900 A.D. (i.e, the "collapse", see Culbert 1973; D. Chase 1992:119). It should also be stressed that the ethnohistoric records were compiled by untrained Spanish explorers and churchmen, and for this reason they must be viewed as biased, possibly "ethnocentric" accounts (A. Chase 1992:31; A Chase and D. Chase 1992:8; D. Chase 1992:118; McAnany 1995:158). Miles (1957:765), for example, has discussed the difficulties the Spanish had in fully grasping the complexities of contact period Maya social organisation. She has also noted that the Spanish had a feudal system at the time of conquest, and cautions that certain feudal characteristics (e g a noble/commoner dichotomy) may have been unwittingly transposed upon the Maya (see Miles 1957.777). Similarly, there is evidence that certain Maya leaders voluntarily placed themselves in "feudatory" relations with the Spanish crown shortly after contact (Gates 1937; see also Tozzer 1941:58, 64). This compliance would have undoubtedly changed the complexion of Maya society considerably. Finally, it is generally problematic that the ethnohistoric accounts derive from the observation of Yucatec Maya society, and it is unclear how representative this group was of other Maya peoples (D. Chase 1992.119)

In the end, it is clear that advocates of this two-class analogy adhere too rigorously to the ethnohistoric record. Too much reliance on these materials leaves one open to Bourdieu's (1977) "idealist" criticism. I would suggest that we do not know for certain whether the descriptions provided by Landa and others refer to the actual make-up of Contact period Maya society, or whether the informants were glossing over the complexities inherent in the system in order to portray themselves as being either ruler (of divine birth), or ruled (of common birth) (see Marcus 1992.224). For this reason the ethnohistoric kinship material cannot be treated as a completely accurate description of the "actual" workings of historic Maya society. As Bourdieu (1977:35) has stressed "representational kinship is nothing other than the groups self-representation and the almost theoretical presentation it gives of itself in accordance with that self-image." Given the questions that Landa asked, and the ethnohistoric Maya's "ideal" concept of their society, we must consider the possibility that the "actual" workings of the society were not recorded (see also D Chase 1992:119, 121; D. Chase and A. Chase 1992b:312-313).

There are, in fact, numerous sections in the ethnohistoric documents which point towards the existence of a much more complex society than is suggested by the noble/commoner model (see also A. Chase and D. Chase 1992b:7; D. Chase 1986:364; D. Chase 1992:121). For example, the famous description given by Landa appears to imply the presence of more than two social strata:

> ...in the middle of the town were their temples with beautiful plazas, and all around the temples stood the houses of the lords and the priests, and then (those of) the most important people. Thus came the houses of the richest and those who were held in the highest estimation nearest these, and at the outskirts of the town were the houses of the lower class [Landa, in Tozzer 1941.62].

Tozzer (1941:62) does note that "it is difficult to make out from this passage and in other places the exact social stratification of the Mayas at the time Landa wrote." However, his reading of Landa also suggests to him that the social organisation at the time of the conquest was more complicated than a noble/commoner dichotomy allows (see also Roys 1972:34 [1943]). A careful reading of Landa does produce a number of passages suggestive of more complex relations. For example, in describing what must be

viewed as "competitive feasting", Landa (in Tozzer 1941:92) asserts that "they have two ways of celebrating these feasts; the first, which is that of the *nobles* and of the *principal people*, obliges each one of the invited guests to give another similar feast" (emphasis mine). Similarly, in discussing the passing on of property to young heirs, Landa (in Tozzer 1941.99-100) notes that "when they [the guardians of the heirs that have come of age] surrender it in this way, it is done in the presence of the *lords* and the *chief men*" (emphasis mine). Tozzer (1941:63) concludes that, "Landa...mentions the nobles and the 'persons of high esteem' as if they were separate classes but as having the same burial customs. He...also tells us that the lords visited the rich who were among the leading men who ruled, presumably under the authority of the nobles. This would seem to show that wealth did not automatically raise one to the highest class". Tozzer postulates further that the term *principale* may have originally been employed to describe this mediary stratum of wealthy individuals, and that it was only later that it was "applied roughly to anyone of the two upper classes."

Farriss (1984:164-165) has argued that an intermediate group of "professional warriors and artisans" existed prior to Spanish contact, and that this stratum of society disappeared as a result of "compression and simplification of the social order." Importantly, Roys (1965:662), himself, has admitted that "[s]ome men, entitled 'rich man' (*ayikal*), are hard to place" (see also Roys 1972:34 [1943]; Tozzer 1941:63). He also states that "[t]here appears to have been an upper fringe of [the commoner class] called *azmen uinic* ('medium man') and defined as 'a man between a principale and a plebian, of middling status'" (Roys 1957.6). He relates elsewhere that this "upper fringe" of the commoner class" consisted of the wealthier people who were not members of the nobility; but unfortunately the sixteenth-century Spanish writers do not make any very definite distinctions between them and the hereditary upper class" (Roys 1972.34 [1943]; emphasis mine). Roys also notes that these "wealthy commoners" could own slaves, which would further differentiate them from the rest of the supposed "commoner class".

However, both Roys (1957:6-7, 1965:662) and Marcus (1992:225-226) conclude that the presence of this group does not necessarily imply the presence of a "middle class". Marcus states that the term *azmen uinic* could refer to "a male member of a minor nobility ... removed from the direct line of royal descent", "a male commoner who held some significant elected or appointed office", or "someone of mixed ancestry " In the end, I concur with Marcus when she argues that the term *azmen uinic* must be

isolated in more contexts before we can adequately assess its true meaning. However, contra Marcus, I believe that it remains open as to whether the possible social statuses implied by the term *azmen uinic*, as outlined above, can or cannot be defined as "middle class". For now, the two terms recognised by Roys (*ayikal* and *azmen uinic*) leave open the possibility that a third social stratum did exist at the time of conquest.

The Complex Society Models

A major criticism can be levelled against all of the aforementioned approaches. As more archaeological work is undertaken, it becomes abundantly clear that none of these constructs can be reconciled with the complexity apparent in the archaeological record (see Adams 1970; Becker 1973:397, 1979a; A. Chase 1992; A. Chase and D. Chase 1992; D Chase and A. Chase 1992b; Culbert 1974:67, 1991:328; Freidel 1983; Green 1970:306; Hammond 1982:189-197, 1991:269-270; Haviland 1966a, 1968; Iannone 1993a, 1993b; Kurjack 1974; McAnany 1995; Morley et al. 1983:225-226; Rice and Puleston 1981:155; Sharer 1993:94; Tourtellot 1983:51) As Culbert (1991:328) has pointed out "from the sheer complexity of Maya civilization, it has long been obvious that there must have been a number of social levels in Maya society." It remains problematic, therefore, that in all the previously discussed cases the Old World, ethnographic, or ethnohistoric materials have taken precedence over the actual archaeological data. As Sharer (1993:91) has recently stated "the delineation of the social organisation of the Classic Maya is fundamentally an archaeological problem." It is significant, therefore, that the complex society model relies heavily on archaeological materials.

This last framework has resurfaced many times in the past (e.g. Barrera Vasques 1951; Borhegyi 1956a, 1956b; Bowditch 1901; Brainerd 1954; W. Coe 1957, 1965; Ekholm 1949; Gann 1918, 1927; Haviland 1970:195; Holmes 1895-97; Kidder 1950; Kirchoff 1943; Lothrop 1924; Maler 1901, 1908a, 1908b, 1911; Mason 1938; Maudslay 1886; Morley 1910, 1915, 1924, 1946, 1949; Olive and Barba 1957; Palerm and Wolf 1957; Satterthwaite 1950; Shook and Proskouriakoff 1956; Spinden 1913, Stephens 1843; E.H. Thompson 1886; Tozzer 1911; Waldeck 1838; Wauchope 1934, Wolf 1959), and has only recently become vogue again. In its current form it has received much publicity, reaching the general public via newspaper articles on the Maya "Middle Class"

(see Chase and Chase in Wilford 1993), or in glossier form in a recent **Time** magazine (Chase and Chase in Lemonick 1993). The most vocal champions of the multiclass model have been William Haviland (e.g. 1970:195) and Arlen and Diane Chase (see A Chase 1992; A. Chase and D. Chase 1992; D. Chase 1992; D. Chase and A. Chase 1992b). The Chases argue that neither the ethnohistoric nor the archaeological records suggest a rigid two-class system. Although the complex society model proposed by the Chases and others seems to be a much more realistic view of ancient Maya society, the Mayanists who espouse it are still having a difficult time explaining how the various components of the "complex society" fit together. The key issue at this time seems to be whether in fact a middle class or middle stratum of people can be isolated in the archaeological record.

The Multiclass Models. Within Maya archaeology the recognition of a "middle class" has revolved around three main issues. The first concerns occupational specialists. Although there are at present varying opinions concerning the existence of such specialists among the ancient Maya, strong arguments have been forwarded for their existence (see Abrams 1994:114-119; Adams 1970; Becker 1973; Ford 1991; Fowler 1991; Gibson 1982, 1989; Hammond 1982:189-197; Healy 1988; Healy et al. 1993, 1995; Hester and Shafer 1984; Iannone 1992:170-174; Kidder 1985; Kintz 1983b; McAnany 1993; Michaels 1989:175; Probst 1986; Reents-Budet 1994; Shafer 1982, 1991; Shafer and Hester 1983, 1986, 1991; Valdez and Potter 1991:205; see also Tourtellot and Sabloff 1972:131). The implication is that the presence of occupational specialists indicates the presence of a middle class (e.g. A. Chase 1992:31-32; A. Chase and D. Chase 1992:12-13; Kintz 1983a:162; Morley et al. 1983:226; see also Willey and Bullard 1965:360; Willey et al. 1965:5). Even Thompson himself, the major advocate of the priest/peasant model, states in one passage that "there seems to have been a smallish middle class . . including artists, craftsmen - makers of idols, for instance - and the religious and political functionaries of small towns and villages" (Thompson 1966:93). Thus, this group, consisting of a variety of occupations such as bureaucrat, warrior, merchant, artist, architect, scribe, trader, to name a few, is seen to represent a middle class in Maya society in the sense that they are not rulers, nor do they toil specifically in food production (see A. Chase and D. Chase 1992:8). Similarly, although there is evidence to suggest that some Maya artists and scribes where of "high status" (Stuart 1993:322; see also Reents-Budet 1994), indications are that they only acquired this

status during the Late Classic, these occupations previously being reserved for "lower- or *middle-class* specialists." (Stuart 1993:324, emphasis mine).

The second body of evidence utilised to argue for a middle class comes from research at the site of Caracol (see A. Chase 1992; A. Chase and D Chase 1992). At this site the Chases have recognised both numerical and spatial trends concerning tomb interments. They suggest that "tombs" are too numerous within both the core and periphery of Caracol to be strictly attributable to an "elite" population (see especially A. Chase 1992). Following this observation, they postulate the presence of a "middle class" or "middle stratum" of individuals. This social standing is also implied by the relative abundance of "luxury or high status" items in both burial and other artefact assemblages throughout the Caracol settlement area (A. Chase and D. Chase 1992:10-11). Spatially, given the distribution of tombs, middle class individuals are thought to have resided not only in the Caracol site core, but also in the periphery. The latter groups are often found in association with agricultural terrace systems (A. Chase 1992:40-41). It is therefore suggested that these people oversaw the operation of the terraces.

Arlen Chase (1992:38) admits that, with the exception of written texts, the presence of tombs or particular items of material culture do "not appear to provide a simple correlation with status at Caracol." He concludes that the most profitable measure of status, at least for Caracol, may derive from a combination of data concerning spatial location, artefact inventory, and tomb *volume*, with the latter being the "best single indicator of status" (A. Chase 1992:40, 48, emphasis mine). The Chases have also resurrected the previously discussed ethnohistoric term *azmen uinic*, which translates as "middle men" or "middle status", as evidence for the presence of a middle class (A. Chase 1992:42; A. Chase and D. Chase 1992:11; D. Chase 1992:121; but see also Roys 1957:6, 1965:662).

Finally, I have previously argued that minor centres and some other middle level settlement units may have been inhabited by social groups akin to a middle class (Iannone 1993a, 1993b; see also Culbert 1974 67). I have ascribed these groups a mediary social position in that I interpret them as having been the "articulators" between the domestic and ruling populations (Iannone 1993a.5, 1993b.14). These sites contain larger and more numerous special function structures than do the smaller domestic groups, yet they rarely contain other features common at the larger major centres, such as ballcourts (see Ashmore 1981b:57; Bullard 1960; Hammond 1975a). This implies that an intermediary

range of social activities were undertaken within the confines of the middle level settlement units. Like upper level settlement, minor centres and other middle level settlement units often exhibit restricted access plazas and control over entrance to the site core (Iannone 1993b; see also Ball and Taschek 1991:157). Similarly, excavations within middle level settlement units suggest that although the inhabitants of these sites had access to exotic and other prestige goods, these items are generally fewer in number and less elaborate than those found in the larger major centres (see Iannone 1993a:17).

It is significant that written texts, whether painted or carved on vessels or other malleable materials, are seldom encountered during excavations at middle level settlement units (see A. Chase 1992:38; Coe and Coe 1956:370; Culbert 1974.60; Leventhal 1981:201; Reents-Budet 1994.140-141, see also discussions in Marcus 1992.224, 1993b; Stuart 1993). This is especially true with regard to the large carved stelae so frequently encountered at the major Maya sites. It is also evident, although to a lesser degree, in the other major writing medium, ceramics. Reents-Budet (1994) has suggested that there probably existed an "intermediate"/"lower-tier elite" or "middle class" polychrome, which was for the most part of inferior quality in comparison to "elite" wares, and often had pseudoglyphs instead of actual written text. In addition, other material culture items commonly recovered from ritual deposits in major centres, such as eccentric lithics, rarely appear in comparable deposits within middle level settlement units (Iannone 1992, 1993c; Iannone and Conlon 1993). Other authors have concluded that such groups exhibit "variable access to 'spendable' wealth apart from the ability to command labour reflected in the group's monumentality and architectural elaborateness" (Ball and Taschek 1991:157). Finally, it also appears that although some minor centre burials may contain elaborate grave offerings, burial assemblages at these sites are more often akin to those of lower level as opposed to upper level settlements (Ball and Taschek 1991.157).

Having said all this, I have recently outlined instances where high status items, such as stelae and eccentric lithics, have been recovered from middle level settlement units (Iannone 1992, 1993a·14-15, 1993c) Given these occurrences, I have argued that in special circumstances members of the middle class were able to obtain some high status material culture items which were normally rigorously controlled by the upper echelons of the society (Iannone 1993a:14; 1993c:9). However, I have concluded that rather than suggesting autonomy on the part of the middle level settlement units, the

presence of these items suggests dependency, or at least a closer relationship with the ruling class (Iannone 1993a.14). It may also indicate the existence of some limited social mobility (Iannone 1993c:9). In conclusion, I have suggested the presence of a mediary social group, or middle class, based not only on the intermediate range of activities inferred to have taken place within the confines of middle level settlement units, but also the mediary nature of the artefact assemblages. This data base suggests to me that the social groups inhabiting these architectural clusters were articulators between the lower level domestic population and the upper level ruling aristocracy. Thus, they were a "middle class" in the sense that they were situated in a medial position within the milieu of ancient Maya social relations.

This final approach builds on the Chases' work as it continued to have a spatial emphasis, as well as a concentration on the presence or absence of specific artefactual and architectural features. However, I felt it to be a refinement in that it stressed that the problem of social organisation was best approached via the analysis of social relations. Specifically, by concentrating on social relationships between groups, and the differing roles that particular social groups may have played within the larger social system, the latter framework provided a more advantageous perspective with regard to social interaction. This focus ultimately facilitated the recognition of a "middle class" or "middle stratum" of individuals.

Critical Summary. The various approaches employed by supporters of the multiclass model remain open to critique. First, it is problematic that not all social scientists would agree with the conclusion that occupational specialisation unquestionably implies the presence of a middle class (see Giddens 1979:109; Marcus 1992:221-222). For example, Raynor (1969:12) notes that although "middle class" occupations may exist within a given societal context, a "middle class" per se is only present when a "distinct class" is forged The validity of this assumption must therefore be explored in a more rigorous fashion before the presence of occupational specialists can be accepted as representative of a middle class.

An initial criticism of the Chases' approach comes from Marcus (1992:224), who questions whether a convincing argument can be made for any tomb interment being "middle class". Marcus argues that some commoners may have been very successful, but in no way can they be considered a "third class - endogamous stratum" (emphasis mine). A more critical concern revolves around the Chases analytical handling of the tomb data

Arlen Chase (1992:37) employs the concept of tomb provided by Loten and Pendergast (1984) in their *A Lexicon for Maya Archaeology*. This lexicon defines a tomb as simply "an elite interment" (Loten and Pendergast 1984:14, emphasis mine). A much more rigorous definition has been provided by Welsh (1988:18) in his definitive examination of lowland Maya burials. In this analysis tombs are considered to have a specific size and degree of structural elaboration, and are contrasted with a number of other interment types, such as "crypts", which are smaller in size and less elaborate in construction (Welsh 1988:17). It is clear that we must distinguish between a "tomb" as simply an "elite interment", and a "tomb" as a grave type with a recognisable amount of elaboration and labour investment involved in its construction The latter is a far superior analytical construct as it permits finer comparisons to be made between interments. It is evident from Figure 3.2 in Arlen Chase's discussion that interments as large as 20 cubic meters in size and as small as 1-2 cubic meters have been lumped together as "tombs". Clearly, any analysis of social structure which relies so strongly on grave volume to isolate a middle class would benefit from a more rigorous classification scheme, such as the one proposed by Welsh.

The Chases' approach and my previous argument can both be criticised for their lack of rigor with regard to the use of terminology. It is problematic that terms such as "middle class" and "bourgeoisie" are employed without adequate definition in both instances (see A. Chase 1992; A. Chase and D. Chase 1992:11, 16; Iannone 1993a:1-6, 1993b:14, 1993c:233). Even the Chases' argue that the term "class" may be problematical in this context as "we do not know whether Mesoamerican society was truly a class system" (see A. Chase and D. Chase 1992:11; Culbert 1991; Henderson and Sabloff 1993.452; G. Marcus 1992:293; J. Marcus 198b:241-242, 1992:224; Sanders 1992:291; Yoffee 1991:287). Similarly, whether the use of such "eurocentric and modernist" terms will facilitate social analysis has been questioned by some (G. Marcus 1992:293; J. Marcus 1992:224).

The Multistrata Models A number of Mayanists have argued for the presence a mediary group without calling it a "middle class". For example, Sharer (1994:510) has indicated that during the Late Classic period an "emerging intermediate group composed of prosperous commoners and the lower ranks of the elite", including "full-time occupational groups such as bureaucrats, merchants, warriors, craftsmen, architects, and artists", began to emerge In his recent study of Copan architecture, Abrams (1994)

also appears to have isolated an intermediary group. He notes that "beneath the various lineage administrative positions were statuses residing in the urban zone and ranking above that of commoner" (Abrams 1994.85). Abrams postulates that these individuals functioned as retainers, and concludes that "the status of these retainers, based again on the energy expended in housing in these large compounds, was higher than that of retainers for lower-ranking lineage administrators, and higher (to varying degrees) than the status of a 'typical' commoner." He also suggests that certain craft specialists may have "achieved a status above commoner but still low within the ranks of lineage or secondary elite" (Abrams 1994:118-119).

As previously mentioned, in discussing their feudal model for ancient Maya society, Adams and Smith (1981:346-347) suggest that some of the plazuelas, indicative of the grey area between lower and middle level settlement, where the home of a middle "stratum". They note that such a "gentry" or "squirearchy" was often found in feudal societies. According to Adams and Smith, this would have been an "agricultural stratum" situated "at the margin between the fully recognised elite (the 'nobility' with their traditional religious sanctions of authority) and the upper strata of the lower agricultural classes." They argue further that "such a social stratum might have been directly subordinate to the provincial elite, supplying most of the elite's support requirements, or indirectly subordinate, owing allegiance and some revenues, but only as a supplement to the incomes that the provincial elite obtained from their own holdings" (Adams and Smith 1981:346). Adams and Smith suggest that this middle stratum may resemble the *ah cuch cab* of the ethnohistoric period.

McAnany (1995) has also employed the term *ah kuch kab* (new orthography) as a label for a mediary group. She has argued that given the principal of first occupancy (see also Landa, in Tozzer 1941:96-97; Miles 1957:759, Vogt 1964:310), and the ownership and control of land resulting from this (contra Chi, in Tozzer 1941:230; Marcus 1983:473), certain social groups living outside of the major centres (e.g. in middle level settlement units) were able to amass considerable wealth, power, and status. Through this control of land, which included not only agricultural fields, but also orchards, cacao groves, and sections of improved land (see Chi, in Tozzer 1941:230), these groups were able to form larger, internally ranked, heterogeneous (McAnany 1993), or multifamily residential compounds (McAnany 1995).

According to McAnany, the stability of these landholding units derived from their ties to the ancestors. For this reason great importance was bestowed upon the ancestor related rituals and shrines which were employed to solidify group identity and reinforce land claims. McAnany also stresses that there were fundamental differences between these kinship based landholding units and the broader institution of kingship, and postulates that for this reason continual conflict and contradiction must have occurred between these smaller social groups and the ruling stratum. Nevertheless, she does not conceive of these groups as a "middle class", nor does she envision them as members of the "elite". However, she does argue forcefully that the presence of these groups rules out the viability of a noble/commoner model. Although McAnany is not explicit, it would seem that she would agree that such groups may have formed a middle stratum, given the wealth, power, and status differences discussed above (see Chapter 2). McAnany's argument is exceedingly important, given the middle level settlement focus of this dissertation. However, it should be stated that although certain middle level settlements would seem to fit the multifamily residential type presented by McAnany, others would not. Middle level settlement variability is such that this model may only be applicable in certain situations.

Still others have argued for the existence of numerous strata. According to Hammond (1982:186), Classic period "society consisted of a number of strata...The most obvious division is between rulers and ruled...[but]...Even among the majority, those who were ruled, distinctions are discernible..." He argues further that "at present we can detect the existence, from archaeological evidence, of at least seven levels in Late Classic society, with some individuals spanning more than one level" (Hammond 1982:189). Hammond's (1982:197) seven levels include: "(1) ruling individual or family; (2) administrative bureaucracy; (3) executive bureaucracy; (4) intellectual specialists - architects, priests, scribes, and the like; (5) craft specialists - potters, sculptors, lapidaries, painters, and so forth; (6) common labourers; (7) peasants." Unfortunately, Hammond fails to prove that each of these *occupations* constitutes a social stratum onto itself.

DISCUSSION

> *At this point in time, there is no adequate model of ancient Maya society that incorporates empirically observed settlement patterns* [McAnany 1995.158].

The major problem with *all* of the aforementioned models is that they require testing against the archaeological record. Athough the complex society models more faithfully reflect what is known archaeologically, they too need to be subject to further assessment in order to determine their explanatory potential. Throughout the discussion I have attempted to underscore the importance of developing an understanding of middle level settlement. This endeavour is extremely important, as the variability within the middle level of settlement has not been effectively explained by any of the models. It is here where the structural and functional replication required by the segmentary state models appears to breakdown to a certain degree, thus limiting the power of these constructs. The "egalitarian" model also has difficulty explaining middle level settlement variability, as does the "ethnohistoric two-class" model. Only the "complex" models appear to be able to accommodate this variability, although it remains little understood. Concomitantly, almost all of the models remain weak because they are not developmental. With the exception of Freidel's "pilgrimage fair" construct, and McAnany's "multifamily residential compound" formulation, all of the models discuss ancient Maya social organisation without reference to change. They promote a static view of ancient Maya society, one which is probably more indicative of the Late Classic period than any other time. In order to realistically characterise ancient Maya social organisation it is required that a developmental model be formulated, one which is reflective of the little understood "minor centres" and other middle level settlement units.

CHAPTER 2

INTERPRETATIVE FRAMEWORK

> *So far as we know, human beings have always lived in association with one another. Even misanthropes and recluses who have renounced their fellows were once members of families or inhabitants of orphanages* [Shibutani 1986.4].

This chapter summarises an interpretative framework which has considerable potential for elucidating ancient Maya social organisation. The formulation is best described as a form of "social archaeology". Although all social archaeology is grounded in broader social theory, the ideas which I will expound herein are informed primarily by "mutualism". The applicability of a mutualist social archaeology lies in the primacy given to the social environment, the emphasis on temporality, its ability to generate rather than mask variability, and its capacity to illuminate social inequality. In order to provide a succinct overview of this approach I wish to begin in fairly broad terms, with a discussion of social archaeology and the philosophical tenets of mutualism. I will then proceed to outline what I consider to be some fundamental units for social analysis: (1) ranked statuses; (2) castes; (3) strata; (4) factions; and (5) corporate groups. Finally, I will suggest an essence, namely "power", with which a comparative analysis of inequality can be expressed, and a method of comparison which employs a series of bundled continua ordinally graded in degrees of "power to" and "power over". I should state at the outset that due to the limitations of the dissertation a comprehensive discussion of these ideas cannot be presented at this time. The interested reader is urged to consulate the various sources summarised herein for more detailed arguments.

SOCIAL ARCHAEOLOGY

> *Social inference does not so much identify a fact that has lain hidden for ages, as help us make use of a model of social life; we are explicitly seeking a contemporary social-theoretical understanding of life in the past* [Wason 1994:3]

Social archaeology is a relatively recent phenomenon (see discussions in Renfrew 1984; Shanks and Tilley 1987; Wason 1994). In reality, it is only within the last decade that social organisation has been seriously considered as a topic amenable to *archaeological* investigation (e.g. Renfrew 1984:19; Wason 1994:2). Previously, it had been argued that the limitations of the archaeological data base inhibited the formulation of accurate social inferences (Leach 1973:764-767; M. Smith 1955). The problem lay in the fact that a "dynamic" social organisation must be inferred from what Binford (e g. 1981, 1983) has characterised as a "static" archaeological record (see also Wason 1994:2).

Recently, however, as archaeologists have begun to focus more attention on the importance of material culture in the negotiation and re-negotiation of social relations (e g. Hodder 1982a; 1982b; 1983; 1986; 1987), it has become clear that the "non-material" aspects of life (e.g. social organisation) can be investigated with the data base available to archaeologists (Shanks and Tilley 1987:107; Wason 1994:2). Shanks and Tilley (1987.137) have emphasised that, "material culture is meaningfully constituted, it is produced in relation to symbolic schemes, structured according to the system of meanings of particular social groups." Ultimately, the production of material culture is directly related to "the social and the structuring of social relations" (Shanks and Tilley 987 97). Thus, material culture does express social organisation, although not necessarily in a straightforward way (Shanks and Tilley 1987:60, 211; Wason 1994.6, 20). As Wason (1994:6) argues, "reliable connections between configurations of material culture and features of social organisation, such that you can use the one to recognise the other, can be found, even though the nature of the connection and the domain of its validity require more careful definition than is often recognised." Considerations of historical context must enter *all* analyses of social organisation from material culture residues (Hodder 1987; Wason 1994 20).

The goal of social archaeology is to understand the past social world through the use of contemporary social theory (Renfrew 1984.4, Shanks and Tilley 1987; Wason 1994:2-3, 7). As Wason (1994.15) states "the intent of social archaeology is to understand a former way of life in the same terms we use to study modern society." He argues further that this approach does not strive to understand how someone in the past would have perceived themselves or their social environment. However, as Wason concludes, "this does not exclude us from saying something real and significant about life in the past, for in describing former societies in terms roughly comparable to a social anthropologist's understanding of living societies, it provides a basis for answering questions about the nature and history of social life." This reliance on contemporary social theory reflects the fact that we cannot hope to understand past social organisation without some reliance on analogies derived from "living society" (Wason 1994:15-16, 27).

Archaeology and social theory make a highly complimentary pairing, especially when considering problems of social change (Shanks and Tilley 1987:137; see also Renfrew 1984:5). Archaeology's strength is its temporality, its ability to address social change over long durations. As Shanks and Tilley (1987:137) have recognised, "in a very real sense the study of long-term social change marks out an intellectual field in which archaeology and social theory do not just come together, with perhaps slightly different perspectives, but actually coalesce." That is not to say that social archaeology and contemporary social theory do not differ in their approach to the problem of social change. Renfrew (1984:10) has emphasised that many of the things that contemporary social theorists take for granted, such as "the size of the social unit, its political organisation, its relations with its neighbours, and the range of roles and statuses held within it" must be addressed by an archaeologist.

Unlike other approaches (e g cultural ecology, cultural materialism, Marxism, structural Marxism), social archaeology does not promote a "hierarchy of determination" (Shanks and Tilley 1987.58, 175) Ecological, political, ideological, and economic relationships are considered in unison. If anything, the "social" is given primacy. Specifically, within social archaeology individuals are ascribed an active role in social change, but it is also conceded that individuals are first and foremost social beings (see Shanks and Tilley 1987 62-63, 71, 210). According to Shanks and Tilley (1987.62-63, 71, 210), an emphasis on individuality may be a purely western, contemporary

perspective. They conclude that "it does not seem to be at all theoretically acceptable to pursue a view of the human subject as endowed with specific capacities and attributes, as the source of social relations, font of meaning, knowledge and action We should insist, therefore, on the logical priority of the social and the structuring of social relations in accounting for all social practices" (Shanks and Tilley 1987:97). Given this view, the material culture residues studied by archaeologists are perceived to be "socially", as opposed to "individually structured" (Shanks and Tilley 1987.98, 210).

MUTUALISM AND SOCIAL ARCHAEOLOGY

> *Virtually all human life consists of participation in a vast array of social transactions* [Shibutani 1986:6]

Having stressed that social archaeology must employ social theory, it is required that the specific "brand" of social theory employed herein be summarised. This is inevitable, considering the vast number of contradictory paradigms currently on offer. Given the principles of a social archaeology, as outlined above, I feel that "mutualism" offers the most advantageous perspective to adopt. Unlike social archaeology, mutualism has a fairly long history in the social sciences. Its roots can be traced to sociology, and the "symbolic interactionism" of William James (1890), John Dewey (1917, 1929), William Thomas (1923), Charles Cooley (1930), and George Mead (1934; 1982 [1914]). The underlying axioms of symbolic interactionism have been summarised by Meltzer et al. (1975:1): (1) "human beings act towards things on the basis of the meanings that things have for them"; (2) "these meanings are a product of social interaction in human society"; (3) "these meanings are modified and handled through an interpretative process that is used by each individual in dealing with the signs he/she encounters." It is also important to state, given the archaeological slant of this study, that symbolic interactionists consider material culture to be socially constituted. As Heiss (1981.57) has stated "one of the major assumptions of interactionist theory is that human beings invest things with meaning thereby converting them into social objects."

According to Meltzer et al. (1975 2), the fundamental dictum of social interactionism is that individuals are inseparable from their social milieu (see also Shibutani 1986:6). They argue further that "coupled with this assumption is the belief

that the inseparability of the individual and society is defined in terms of a mutually interdependent relationship, not a one-sided, deterministic one" (Meltzer et al. 1975.2; see also Hewitt 1976:229; emphasis mine) Mead (1934:227), as one of the major proponents of symbolic interactionism, felt that all organisms lived in a social world. However, as Godelier (1986 1) has pointed out, "human beings, in contrast to other social animals, do not just live in society, they produce society to live " Even the most subjective of matters, namely personal thought, can be viewed in this light (Mead 1982:32 [1914]). Geertz (1973:360) has emphasised that "human thought is consummately social: social in its origins, social in its functions, social in its forms, social in its applications At base, thinking is a public activity - its natural habitat is the houseyard, the marketplace, and the town square." He concludes that "the implications of this fact for the anthropological analysis of culture...are enormous, subtle, and insufficiently appreciated."

Symbolic interactionist ideas have also been influential outside of sociology. The basic tenets have been retained within the "mutualism" of social psychology (e.g. Still and Costall 1987). More recently, this derivative mutualist theory has been presented to anthropology by Carrithers (1992; see also Megarry 1995). In broad terms, the present mutualist ideas of social psychology and anthropology are also related to the "mutualism" of biology (e.g. Boucher 1985; Kawanabe et al. 1993). However, it is important to point out a significant difference between these two approaches. Whereas the mutualism of biology focuses on the advantageous, symbiotic relationships between species, the mutualism of social psychology and anthropology emphasise the mutual interdependence within social interaction, but do not necessarily see this mutual interdependence as being consistently advantageous to both parties.

Within anthropology Carrithers (1990.278) has recently defined "mutualism" as "a loose collection of viewpoints sharing the insight that human life is constituted in interaction and intersubjectivity." Once again, the fundamental principle of this approach is that "people are social...they exist and act in relation to each other" (Carrithers 1992.10, emphasis mine). As within social archaeology and symbolic interactionism, material culture and other inanimate objects are considered active social entities. Carrithers (1992 45) notes further that "we do tend to reason as if the inanimate world were human - or animal-like, made in the image of thinking, planning, intending beings " Similarly, it is again assumed that even the most subjective of activities (i.e., thought)

must be viewed as being "interpersonal" (Carrithers 1992 11). Carrithers (1992.34) suggests that what characterises humanity is its high level of "sociality", which he defines as "a capacity for complex social behaviour" (see also Carrithers 1990 278). This sociality is highly variable (Carrithers 1992:1), and it is the ability to "fashion more complex and more varied forms of social life" that constitutes the "evolutionary ratchet" (Carrithers 1992:40, 47; see also Megarry 1995). Thus, within mutualism other supposed "prime movers", such as technology and language, are considered "subsidiary to the development of social intelligence" (Carrithers 1992:52, 65; see also Megarry 1995). In discussing technology, Carrithers (1992 65) emphasises that "skills and tools exist not merely in a relationship between people and the material world, but are components of activities carried out in respect of other people." Similarly, he states that "speech...is a mutual, intersubjective activity, and central to this mutuality is the fact that people do things to, for, with, and with respect to other people through speech" (Carrithers 1992:72).

Carrithers (1992:2) argues that "if each discipline can be said to have a central problem, then the central problem of anthropology [and by association archaeology] is the diversity of human social life." Like social archaeology, mutualism strives to elucidate this social variability by advocating a temporally sensitive approach (Carrithers 1992:29). In criticising static approaches to social analysis, Carrithers (1992:9-10) underscores that "even when we do something that seems traditional, we do so in new conditions, and so are in fact re-creating tradition rather than simply copying it." He argues further that "the worlds that anthropologists find are always...a permanent half-way station between one condition and another, between a past and a future and between one society and another" (Carrithers 1992.21).

MUTUALISM, SOCIAL ARCHAEOLGY, AND THE SOCIAL GROUP

> *in all cases different societies have organized, transformed and been in contact with the environment in a collective manner rather than as individual members of a species* [Megarry 1995 42, emphasis in the original].

What makes mutualism and symbolic interactionism particularily attractive, besides the obvious correspondences with social archaeology, is the emphasis on social

groups (see Carrithers 1992.56; Mead 1934.227, 261-270). Within a group oriented approach emphasis on the individual is again considered to be a trait of contemporary, western societies (Shibutani 1986:74). Shibutani (1986:6) has defined the social group as "people in sustained association who are related to one another in understood ways." As Meltzer et al. (1975.47, 52) point out, prior to the work of the social interactionists "the group" had never been considered an important unit for analysis. Symbolic interactionists argue that "society consists of extended interlinkages of joint actions and collectivities in which diverse people and activities are interconnected over space and time" (Hewitt 1976:167). Meltzer et al. (1975:48) underscore the importance of the group in noting that "the group [is] of an organic nature in the sense that it [is] composed of interacting individuals who share...certain ideas which define...their membership within the group...the group provide[s] the conditions for behaviour by presenting shared meanings to each individual for his/her interpretation." Shibutani (1986:7) has further stressed the importance of the social group as a unit of analysis, arguing that "the study of individual behaviour tells us only what a given participant contributes; it does not account for the overall pattern of concerted action."

It is the symbolic interactionist's and mutualist's concern with groups that opens the path for the investigation of social organisation. One cannot overemphasise the importance of exploring varying forms of social organization through sociological, anthropological, and archaeological analyses. As Megarry (1995:42) has stressed "it is because human social organization is an extra-somatic creation, a phenomenon which has definite biological prerequisites but is not in itself biological, that so many different environments have been claimed as human habitats." Social organization has been defined as "the totality of patterned relations among the members of a society, the subgroups formed in the course of these relations, and the relations among the groups and their component members" (Fried 1967 8; see also Meltzer et al. 1975:116). Mead (1982 105 [1914]) has argued that "social organisation arises through the concrete interrelation in which individuals are brought into all sorts of relations to ourselves. .over against this lies the attitude of the group, or of individuals within the group, to people outside." These statements reaffirm the importance of the "group" as a unit of analysis within the examination of social organisation.

SOCIAL ARCHAEOLOGY, INEQUALITY, AND GROUPS FOR ANALYSIS

> *Human beings are not the only creatures living in groups. But one of the distinctive characteristics of human society - compared with insects, birds, or other primitive societies - is the extraordinary degree of flexibility found in the varied forms of joint endeavour* [Shibutani 1986:8]

In emphasising a social archaeology grounded in mutalist theory, and reliant on the importance of the "group", the ideas most relevant to the study of social organisation become those related to the study of social inequality (e.g. Wason 1994:18). Many authors have questioned whether any society has ever had "full equality" (e.g. Cancian 1976:227; Crompton 1994:1; Fried 1967:32; Shibutani 1986:176; Wason 1994:1, 41), and taken literally, the term "egalitarian society" appears to be a misnomer. As Wason (1994:1) suggests, "quite likely there has everywhere been a tendency for some people to accrue favour, prestige, and a recognised superiority." Berreman (1976) provides a succinct discussion of inequality. He argues that inequality is

> 1). a behavioural phenomenon, in the sense that people act on their evaluations; 2). an interactional problem in that these actions occur largely in the context of interpersonal relations; 3). a material phenomenon in that their actions entail different access to goods, services, and opportunities; and 4). an existential phenomenon in that people experience their statuses and respond to them, cognitively and affectively [Berreman 1976:4].

In order to approach the study of inequality from a mutualist perspective, it is prescribed that one begin with the most basic social unit, the *social transaction.* As defined by Shibutani (1986:5), a social transaction is a "joint enterprise involving the coordinated efforts of two or more participants." Significantly, where the social transaction is sustained, due to the length of time needed to complete it or its overall complication, social transactions are often undertaken in groups (Shibutani 1986:6, 9). In discussing the social transaction, Shibutani has stressed the importance of time. He argues that "each social transaction ..is constructed over time in a succession of reciprocity adjustments and readjustments of the participating individuals to one

another." Similar arguments have been made by Bourdieu (1977), Gosden (1994), and Weber (1947.112). Shibutani (1986.7) also emphasises that the majority of social transactions are "goal oriented". Clearly, these goals may be achieved through both co-operation (both sides benefit), or conflict (one side benefits).

"A role is a component part of an organised [social] transaction, a model of what a person enacting that part is expected to contribute" (Shibutani 1986·12; see also Fried 1967:29; Nadel 1957.20; emphasis mine). According to Shibutani (1986:13), roles are "expected patterns of behaviour", and individuals generally play a number of different roles as they negotiate their way through various social transactions (see also Fried 1967:29; Runciman 1989:3). "Members of communities and groups that persist tend to develop a network of social relationships, and social status refers to the position that one occupies in such organised contexts" (Shibutani 1986:13, 175; see also Fichter 1971:51, 60; Fried 1967:29; emphasis mine). Shibutani notes that each individual may have a number of different statuses (i.e., in each group within which one is a member, and in the community as a whole), each status being related to other statuses in a "network" (Shibutani 1986:13, 175; see also Fichter 1971:58). However, one's status in the community supplants the numerous other statuses one may have in various smaller social groups (Shibutani 1986:176; see also Fichter 1971:58-59). Although groups themselves may sometimes have status, "there is no necessary connection between a status and a group" (Service 1971:16).

Shibutani (1986:175) points out that each "incumbent" of a particular status can enter into a number of different social transactions, and each transaction may call for different roles to be played (see also Fichter 1971:59; Merton 1968·42; Nadel 1957:20). Ultimately, one's status may determine the types of roles one is allowed to take up in a social transaction (Shibutani 1986:175), as some roles require a higher status than others (Fichter 1971.59). Fichter has indicated that within a particular society the roles with the greatest "prestige" are limited in number. Some researchers stress this "hierarchical" aspect of status (Fried 1967.32-33; Nadel 1957:29; see also Littlejohn 1972:47). Fried (1967:32) has gone so far as to state that "all known societies do create status hierarchies; even the simplest usually have a few different statuses that do not necessarily integrate into a single overall order." Where such social inequality is weakest, sex, age, intra-familial roles, and certain acquired characteristics may delineate status differences (Berreman 1976:8-9; see also Shibutani 1986:176). When one moves beyond this to

"institutionalised" inequality, a number of social units present themselves for analysis (ranked status, caste, stratum, faction, and corporate group). It is these social units which are most pertinent to the examination of the Middle Formative to Late Classic Maya (ca. 900 B.C.-900 A.D., the time span under consideration in this study).

Prior to outlining these social units, a caveat is required. In undertaking a social analysis one must remember that "social organisations" or "social systems" are "abstractions", they cannot be observed directly (Wason 1994.6). Similarly, "society" is viewed not as a constant or omnipresent, "container" for social transactions, but rather as something continuously created and re-created through social transactions (see Denzin 1992:23; Shanks and Tilley 1987:57-59; Shibutani 1986:25). As Wason (1994:15) has argued, "'society' is not something we actually observe but a 'theoretical' ordering (or sometimes explanation) of a set of empirical observations." Similarly, the social units defined below are also "models" for patterned social transactions which are created and re-created through social processes. They do not exist without the social relationships that form them (see Shanks and Tilley 1987:59). These social relations themselves are produced, they do not exist without the interaction of people. Godelier (1986:18) has stressed this point, arguing that social relations "do not exist without human intervention and action producing and reproducing them each day - which does not mean that they are always reproduced in a form identical to that of yesterday or the day before yesterday."

In the end, the social units discussed below are the "products" of social interaction, rather than inherent categories. Part of the endeavour is to explain the production and reproduction of such groups, as they do not, and have never existed prior to their social creation. It is also imperative to stress that although these social groups are often employed individually as primary units of analysis (e.g. A. Chase 1992 [classes/strata]; Conlon 1993, 1995 [corporate groups]; Hendon 1991 [corporate groups]; Iannone 1993b, 1993c, 1994b, 1995b [classes/strata], McAnany 1993, 1995 [corporate groups]; Marcus 1983a, 1992, 1993 [castes]; Pohl and Pohl 1994 [factions]), they more often than not co-exist concurrently. In a given social setting all may be operative at the same time, in both co-operative and conflictive ways. At any given time an individual may simultaneously have a ranked status, and be a member of a corporate group, faction, stratum, and caste. In the following discussion, having first established the most basic form of institutional inequality, ranked statuses, I will proceed to discuss

the social units in what might best be considered "reverse order" (i e., from largest to smallest). This format is profitable in that it permits the reconciliation of the competing "two-class" and "multiclass" models for ancient Maya social organisation (see Chapter 1).

Ranked Statuses

The first social unit which must be worked into a social analysis of the ancient Maya is the ranked status (Figure 2.1). According to Berreman (1976:9) "ranked organisation is basically that in which inequality is institutionalized into a hierarchy of statuses - superior and inferior positions of prestige and dominance - that extend beyond age, sex, personal characteristics, and intrafamilial roles" (see also Wason 1994:45). Fried (1967:109) has stressed that within a ranked society the status positions carrying the most prestige are limited in that "not all those of sufficient talent to occupy such statuses actually achieve them." Numerous societal examples can be isolated wherein status inequalities are "institutionalized", but where stratification (see below) is not present (Fried 1967:109; Wason 1994.44). In some of these ranking is primarily achieved and irregular in form, but in more typical cases ranking is more "regular", although it may be acquired through both achieved and/or ascribed means (Wason 1994:44-45, 48). In such groups kinship and heredity play a major role in determining one's rank (Berreman 1976:9; Clark and Blake 1994:21).

A *social* process which has been considered instrumental in the amplification of social inequality, and the concomitant entrenchment of ranked statuses, is competitive feasting (see Blanton and Taylor 1995; Clark and Blake 1994; Hayden 1990, 1992; Hayden and Gargett 1990:14). This activity has been recognised as consequential to the development of social inequality in both marginal (Blanton and Taylor 1995:137), and rich ecosystems (i.e., where resources are difficult to overexploit; see Clark and Blake 1994; Hayden 1992:555, Hayden and Gargett 1990:5). Competitive feasting is a social process whereby self-motivated accumulators (Hayden 1990.36, 1992:555; Hayden and Gargett 1990:4) or aggrandizers (Clark and Blake 1994) strive to control resources, expand production (of all types), mobilise larger social units (to achieve the aforementioned goals), and generally enhance their status within the community (see Clark and Blake 1994 17, Hayden and Gargett 1990:13) Proponents of this model

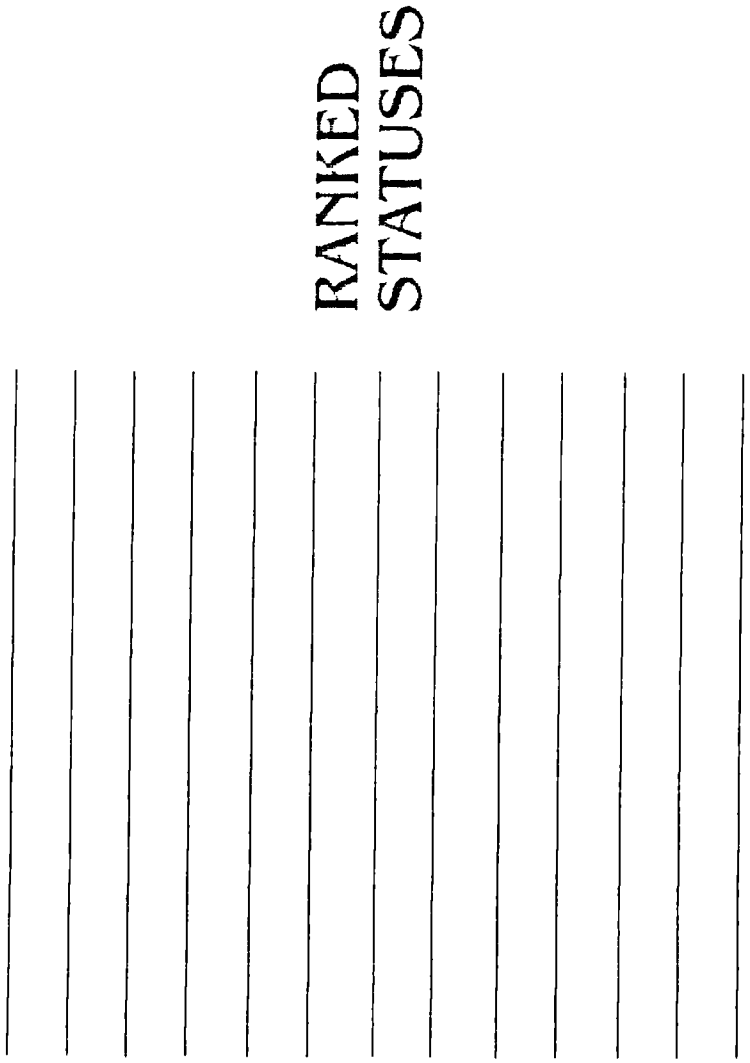


Figure 2 1. Schematic model of ancient Maya society showing ranked status divisions

assume that "the development of social inequality was...a long-term, unexpected consequence of many individuals promoting their own aggrandizement" (Clark and Blake 1994·17).

Hayden and Gargett (1990·14) argue that "it is above all the non-threatening generation of debt, the structuring of debt to the benefit of the key participants in the system, and the prospect of future gain for all supporters, that are the critical aspects for understanding the emergence of accumulators through competitive feasting" (see also Clark and Blake 1994:18; Hayden 1990:36). Within these debt relationships periodic economic crises can exacerbate already extant social inequalities (Clark and Blake 1994.18), as debts may be called in at such times, further widening the gulf between creditor and debtor. Four primary characteristics of competitive feasting have been highlighted by Hayden and Gargett (1990:15): (1) all participants foresee the accrual of benefits; (2) in their role as feast "organisers" accumulators are able to consistently garner debts, favours, and material wealth; (3) accumulators promote feasts as a community benefit (i.e., in the guise of placating the gods); (4) competitive feasts do not facilitate the redistribution of basic food items, nor do they function to aid communities in times of crisis.

Blanton and Taylor (1995:117) emphasise that competitive feasting leads not only to the increased acquisition of exotic/trade items, and the cultivation of "exotic" food stuffs (see Hayden 1990), but also a concomitant intensification in overall production (e.g. basic food stuffs, craft specialisation). They also underscore that "this intensification is primarily a product of social behavior, rather than an adaptation to climate change or population pressure" (Blanton and Taylor 1995:1; see also Clark and Blake 1994; emphasis mine). Ultimately, "aggrandizers compete for 'prestige'; competition over physical resources is not an end in itself" (Clark and Blake 1994.18; emphasis mine). However, it must be stressed that in seeking to enhance their own prestige "the most successful aggrandizers are those who provide the most physical, social, and/or spiritual benefits to the most people on the most reliable basis" (Clark and Blake 1994.21). Thus, in actuality, accumulators (or aggrandizers) are both "fungal" and "functional" (Rathje 1983; Vogt 1983b.17; contra Hayden and Gargett 1990)

Archaeological Correlates of Ranked Statuses. According to Wason (1994 22-23), the material residues of ranking will undoubtedly vary with each social or historical context. The presence of ranked statuses can therefore be suggested by a

number of criteria (see Blanton and Taylor 1995.17, Clark and Blake 1994.22; Hayden 1990:36; Hayden and Gargett 1990.16). These include: (1) the presence of performative architecture, such as temples, which provide the specialised setting for rituals and/or feasts; (2) the presence of "private wealth" or "prestige items"; (3) recognisable differences in burial assemblages; (4) evidence for trading to acquire exotic "feasting gifts", ritual implements, and "prestige items"; (5) an increase in population size and density; (6) a recognisable increase in the production of basic food stuffs; (7) the construction of facilities to store surplus production; (8) the production of "exotic" feasting foods; and (9) evidence for craft specialisation.

Ranked Statuses in Ancient Maya Society. To date, our understanding of the development of ranked statuses in the Maya subarea has been hindered by our limited knowledge of the Early (2,000-900 B.C.) and Middle Formative (900-300 B.C.) periods. Arguing from one of the few available early Middle Formative data bases, the researchers at the northern Belize site of Cuello have suggested that the Maya were predominantly "egalitarian" until near the end of the Late Formative period (ca. 400 B.C.; see Hammond 1991.246; Robin and Hammond 1991:225; Wilk and Wilhite 1991:129). However, these researchers do present data which *may* be suggestive of the early onset of status differences. For example, they note that grave goods were discovered with individuals of varying age and sex (Robin and Hammond 1991:208), possibly reflecting ascribed statuses (Hammond 1991:246; Hammond et al. 1991:352, 362). Clearly, this data may imply that age, sex, intra-familial roles, and other acquired characteristics were not the primary determinates of status, as is the case in societies with weakly developed inequalities ((Berreman 1976:8-9; see also Shibutani 1986:176; see above). Similarly, although much of the early settlement was homogenous, the presence of special function, non-residential architecture (Wilk and Wilhite 1991:129) also implies some ranked differences (Clark and Blake 1994:22).

By comparison, a consideration of the Cunil phase data base at the site of Cahal Pech, which has recently been re-dated to the Early Formative period (ca. 1200-900 B C.; Healy and Awe 1995 198-215, Table 1), has prompted Awe (1992:365) to conclude that "even at this early stage...the cultural traditions of these Cunil phase settlers were not indicative of a totally egalitarian community." Awe argues that a large Cunil phase cache, containing numerous exotics (marine shell, obsidian, greenstone), represents "the conspicuous consumption of wealth" normally indicative of status

embellishment in a ranked society. He also postulates that some of the Cunil phase figurines might be representative of "lineal" heads (Awe 1992:366-367). The subsequent increase in the presence of these figurines, and the appearance of special function structures during the ensuing Kanluk phase (ca 900-350 B C) appear to confirm the presence of a ranked society during the Middle Formative (see Awe 1992:366-368).

Awe's observations are lent credence by research in the adjacent regions of the Gulf Coast, where ranking is definitely present by *at least* 900 B.C. (Grove and Gillespie 1992:204), and the Mazatan region of Chiapas, where ranked society appears by at least 1400 B.C. (Clark and Blake 1994:22). In broader terms, Hayden (1990) has argued that many of Mesoamerica's first domesticates (i.e., avocados, chili peppers, squash, and bottle gourds) may have initially been cultivated for use by accumulators in competitive feasts (see also Clark and Blake 1994:25). Similarly, bone collagen analysis of Early Formative populations in Chiapas suggest that maize contributed little to the diet until the Middle Formative period (Clark and Blake 1994:28). Given this data, Clark and Blake "suggest that maize may have been adapted as a status food and not as some sort of far-sighted, prehistoric agricultural improvement project." In general, it is accepted that ranked statuses had appeared in ancient Mesoamerica by the onset of the Middle Formative (Grove and Gillespie 1992:191).

Caste

A second social unit considered applicable to the analysis of ancient Maya social organisation is the caste (Figure 2.2.). Littlejohn (1972:70-73) has pointed out that the term caste can be applied in a number of different situations (not just the commonly cited Indian example), deriving as it does from the Portuguese term *casta* "meaning race, lineage, or pure stock" (see also Van den Berghe in Cashmore 1984:44). He notes further that the Portuguese word comes from the Latin *castus*, which can have a variety of meanings including "morally pure". Van den Berghe (in Cashmore 1984 44) concurs, noting that caste can be employed to describe the stratification systems of a number of societies (see also Davis 1948:385) He argues that all caste systems have three basic traits: (1) group endogamy; (2) hereditary status, resulting from ascriptive membership in the group by birth; and (3) the ranking of the different endogamous groups into a hierarchy (see also Runciman 1989:24). Similarly, Berreman (1969.74) defines caste

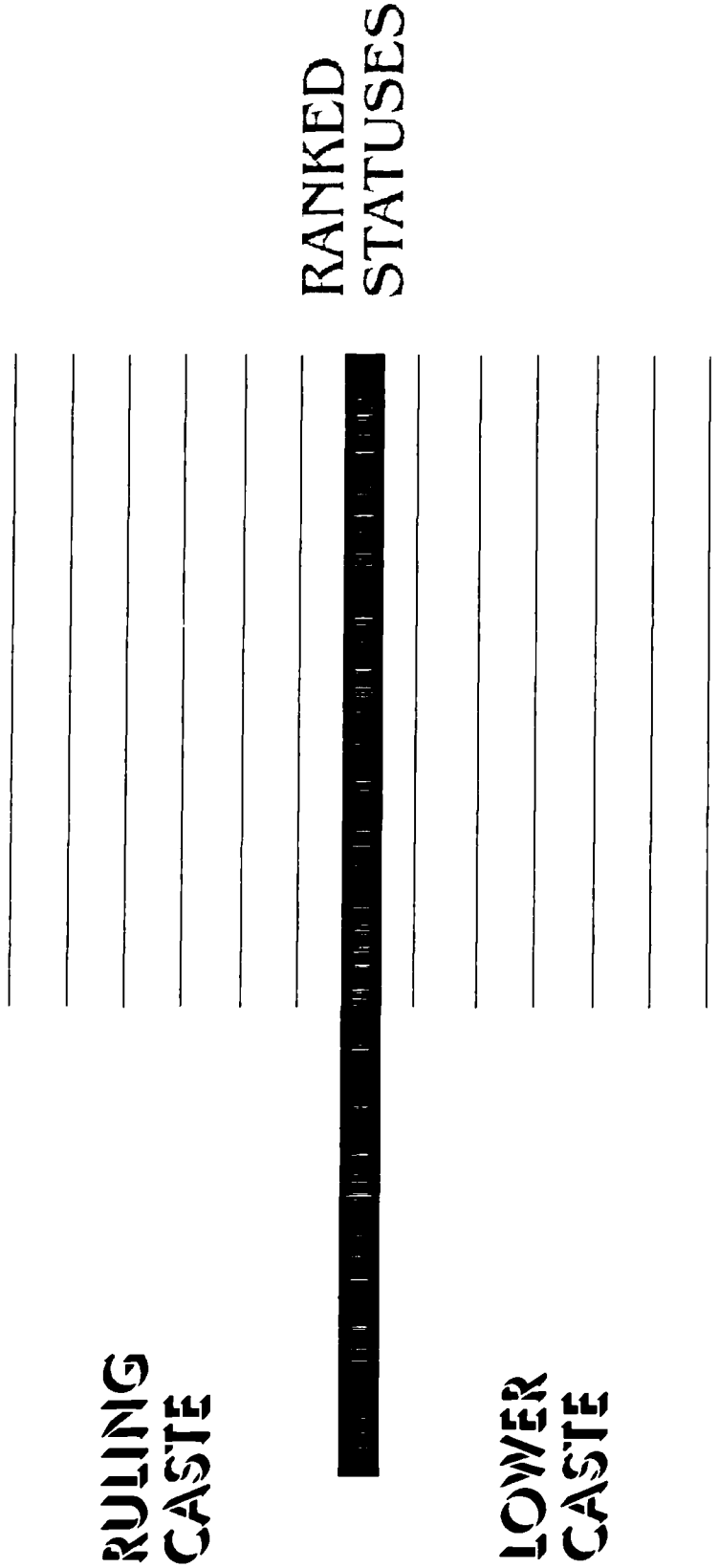


Figure 2.2. Schematic model of ancient Maya society showing ranked status and caste divisions.

systems as "a hierarchy of endogamous divisions in which membership is hereditary and permanent." He suggests further that this hierarchy "includes inequality both in status and in access to goods and services." Haviland (1993.297) in turn states simply that , "castes are strongly endogamous and offspring are automatically members of their parents caste." Finally, Heller (1969:522) effectively differentiates between "ruling caste", and "ruling class":

> A ruling caste comprises a homogenous stratum expected to perform the most important social tasks and recruit its personnel through biological reproduction. Ranking highest in prestige, it is set apart from the rest of society by religion, kinship, language, residence, economic standing, and occupational specialization. Social control is enforced by religious ritual rather than by a centralized body of law, and the state is either nonexistent or plays a minor role in the life of society.
>
> Social leadership concentrated in a ruling class also exhibits the presence of a single stratum in charge of various key social functions. However, it is recruited in a variety of ways and although heredity continues to provide access to this class it no longer constitutes the chief justification for such access. Lineage makes way for property, and wealth, whether ascribed or achieved. The member of a ruling class share not only their functional positions but also more general habits and culture [emphasis mine].

Archaeological Correlates of Caste. Given that individuals are born into a caste, markers of ascribed status become the significant indicators of caste membership. Similarly, although it is often implicit, castes are differentiated based on their "distance" from paramount divinity, as ideologically expressed in degrees of "purity", "pollution", or "diviness" (see above). Thus, castes might best be recognised using socio-ideological markers (although soci-economic and socio-political differences can also be reflective of a caste hierarchy). Specifically, where the production and redistribution of ideological texts, and other socio-ideological artefacts, can be attributed to a ruling caste, these may help to delimit caste affiliation. The treatment in death (e.g. number and types of grave goods, grave form, body position) also constitutes a likely avenue for isolating different castes. A number of other possible archaeological correlates of castes, specifically those

relevant to the study of Mesoamerican societies, have been discussed by various authors in Chase and Chase (1992a).

Castes in Ancient Maya Society The ruling caste definition (see above) seems to best fit the social relationship represented by the ethnohistoric noble/commoner dichotomy, as presented in the various two-class models (e g. Marcus 1983a:470, 1992:221-226, 1993:114-115; see discussion in Henderson and Sabloff 1993:451-452). Affirmation of this comes from Carmack's (1981) discussion of the ethnohistoric Quiché Maya. He notes that the "fundamental stratification at Utatlán was a caste division between the lords, called *ajawab*..., and their vassals, the *al c' ajol*" (Carmack 1981:148; emphasis mine). A third caste, comprised of slaves, was also present. Carmack (1981:50) stresses further that "the traditional caste features of economic complementarity, ideas of ritual contamination, and political domination characterized relations between lords and vassals at Utatlán." Importantly, Carmack also relates that these castes were endogamous. This is, I believe, the proper use of the terms caste and class (contra Marcus 1983a:470; 1992:221-226; 1993:114-115). Even Roys (1967:188, 192 [1933]) has utilised the term *caste* in this manner in his discussions of hereditary inheritance amongst the ethnohistoric Yucatec Maya. In discoursing on the importance of genealogy and pure descent to the "ruling class" he has also employed the term "caste" (Roys 1972:33 [1943]).

Seymour-Smith (1986:32) does stress that castes are "corporate social units which are ranked and generally defined by descent, marriage, and occupation." With reference to the occupational criteria, others have noted that in some instances, for example even in the extreme Indian case, *some*, but not all occupations are hereditary (Littlejohn 1972:71-73; see also Schroeder 1992:61; emphasis mine). Still others have preferred to use the term "occupational sub-caste" to describe this situation (Cheater 1986:142, 238). Berreman (1969) indicates that occupational specialisation is a "correlate", as opposed to a consistent "criteria". It is clear, however, that ascriptive occupations do not have to be present to have a caste (Van den Berghe 1984.44). Interestingly, there is ethnohistoric evidence to suggest that certain occupations were hereditary among the Maya (e g. ruler [Landa, in Tozzer 1941:87; Roys 1957.6-7], priest/scribe [Landa, in Tozzer 1941 27], artisan [Carmack 1981:154]). There also exists archaeological evidence which seems to back up this assertion (e.g. scribes [Reents-Budet 1994, Stuart 1993]; ceramic producers [Reents-Budet 1994]; possibly

lithic producers [the Colha example, as discussed in Shafer and Hester 1983, 1991], see also Hammond 1982.186). This is something which could be explored further in the future to assess the potential presence of this trait within the ancient Maya caste system.

In summary, the term caste seems to be a reasonable term to employ when discussing the endogamous kinship divisions recognised by advocates of "two-class" models for ancient Maya society. This suggestion is confirmed by the emphasis on divine vs. commoner birth (i.e., differing degrees of divinity, pollution, or purity) within these models. That is not to say that more than two castes did not exist amongst the ancient Maya. As Hammond (1982 186) has suggested, ancient Maya society may have been composed "of a number of strata, membership in which was obtained by birth, or perhaps occupation - which may have been hereditary." He notes further that the "ruled" vs "ruler" dichotomy is only "[t]he most obvious division." If Hammond's ideas prove accurate, further research may suggest an extremely complicated arrangement of ranked kinship groups. In the end, what has become clear is that the noble/commoner "castes" should not be conflated with classes, and that the presence of two castes does not automatically attest to the presence of two social classes.

Stratum

The third social unit deemed relevant for the examination of ancient Maya social organisation is the stratum (Figure 2.3). I employ here the term stratum, as opposed to "class", given the ongoing debate over the validity of using the latter term in the study of non-capitalist societies (e.g. Crompton 1993:4; Giddens 1979:110, 162; for discussions specific to the Maya example see A. Chase and D. Chase 1992:11; Culbert 1991; Henderson and Sabloff 1993 452; Iannone 1994b; G. Marcus 1992:293; J. Marcus 198b.241-242, 1992 224, Sanders 1992.291; Yoffee 1991:287). In strict definitions, a "stratified society" is defined as a hierarchy of inequality divided into a series of social strata in which there is differential access to "essential" or "basic" resources (Berreman 1976:10; Fried 1967.186; Wason 1994:57). Others prefer a broader definition (e.g. Cancian 1976:232; Weber 1947:428-429). For example, Weber (1947:428) has argued that "the primary manifestations of status with respect to social stratification are conubium, commensality, and often monopolistic appropriation of privileged economic opportunities and...prohibition of certain modes of acquisition" (emphais mine). This

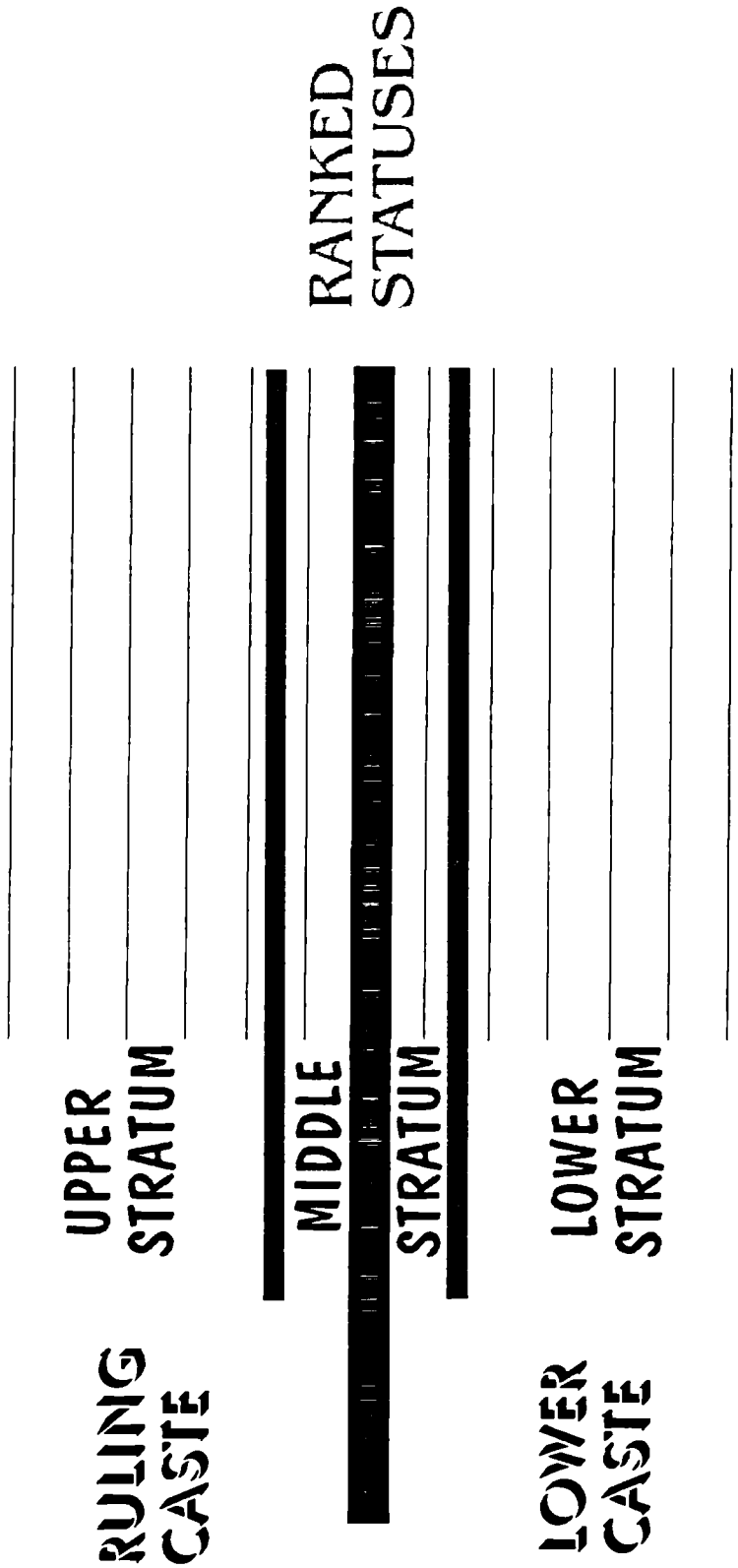


Figure 2.3. Schematic model of ancient Maya society showing ranked status, caste, and stratum divisions

addition to the definition seems profitable, emphasising as it does the control over the distribution of not just "basic resources", but also "status goods." Within social stratification kin related characteristics are less important, and those individuals or groups which share similar access to basic resources are considered to be of the same stratum (Berreman 1976:10). According to Weber (1947:394) "a social 'stratum' is a plurality of individuals, who, within a larger group, enjoy a particular kind and level of prestige by virtue of their position and possibly, also claim certain special monopolies." Stratum members also usually share "similar rights and duties, regardless of age, sex, or other personal attributes" (Shibutani 1986:176), and they "tend to congregate in common areas of residence, to enter characteristic occupations, and to marry among themselves" (Shibutani 1986:177). For the purposes of this analysis, it is important to stress that stratification refers to "the ranking of broad categories of people, not the ranking of individuals" (Shibutani 1986:176; see also Fichter 1971:61; emphasis mine). In connecting social transactions, roles, and statuses to social stratification, Shibutani (1986:404) concludes that "since the roles enacted in various transactions depend on the participant's social status, many power relations are parts of a system of social stratification."

Archaeological Correlates of Strata. Weber (1947:394) deems the most important aspects of strata development to be "...a peculiar style of life, including, particularly, the type of occupation pursued ... hereditary charisma arising from the successful claim to a position of prestige by virtue of birth ... [and] ... the appropriation of political or hierocratic authority as a monopoly by socially distinct groups" (see also Cowgill 1992:206-207). Clearly, a variety of data can be employed in the recognition of social strata. Within a given society the upper and lower strata may be the most easily discernible, as suggested by significant differences in artefactual, mortuary, architectural, and osteological data. In contrast, a middle stratum may be more difficult to isolate. However, in discussing such an "intermediate" social stratum, Shibutani (1986:178) has pointed out that "those in the middle...develop characteristic lifestyles. Among the orientations often found in the middle ranks is a tendency to admire and emulate those above and to keep a safe distance from those below. Hence, much concern develops over maintaining appearances." This "emulation" and distancing should be reflected in the archaeological record.

Stratification in Ancient Maya Society. Most Mayanists accept the existence of an upper and lower stratum within ancient Maya society These divisions are often conflated with the noble/commoner dichotomy previously discussed. However, the presence of a middle stratum has been less well received (e.g. Marcus 1983a:470, 1992:221-226; 1993.114-115). Having partially rectified this situation by employing the term caste for the endogamous kinship groupings emphasised by advocates of the two-class model, I hope to fully reconcile the two-class and multiclass (or preferably multistrata) constructs by establishing that a middle stratum could have existed along with two or more castes. In discussing the ethnohistoric Quiché Maya, Carmack (1981:152) has argued that:

> Had the stratification of Utatlán consisted only of the lord, vassal, and slave castes, social conditions might have been stable. In fact, however, they were not, because new, specialized ranks of people were constantly being created by the changing fortunes of the community. Inasmuch as these ranks were not institutionalized under Quiché law and were derived from specialized productive and occupational activities, they can be viewed within a social-class framework [emphasis mine].

Carmack sees this "middle sector" of society as consisting of certain military ranks, merchants, and artisans. Both "socially climbing vassals" and "younger and peripheral kinsmen of the Lords" could achieve the mediary military rank of *achij* (Carmack 1981:152). Merchants, on the other hand, appear to have had a "class" of their own, situated between the vassals and the Lords (Carmack 1981:154). Finally, Carmack argues that artisans "made up a specialized ethnic group", again situated between the vassals and Lords. Thus, following Carmack's (1981: Table 6.1) analysis, it would appear that the ethnohistoric Maya of Utatlán exhibited three endogamous castes, as well as a number of occupational strata. In some cases these strata cross-cut the caste boundary. Thus, in general terms, the middle stratum consisted of both lesser nobles and wealthy commoners.

The various data bases presented by the advocates of both multiclass and multistrata models (see Chapter 1) also confirm the likelihood that a "*middle stratum*" existed within ancient Maya society. There is evidence in all three instances for "a

peculiar" lifestyle, whether it be suggested by occupational specialisation, treatment in death, or habitation within the vicinity of special function architecture, the latter suggesting specialised social roles or activities. The data also indicate "prestige by virtue of birth". This is especially clear with regard to those inhabitants of the larger, multifaceted minor centres. Finally, the presence of specific status items, and the lack of others, seems indicative of a "socially distinct " group with some limited political authority (see Iannone 1993a 14, 1993c; Iannone and Conlon 1993). That the inhabitants of minor centres controlled, or at least managed intensive agricultural land (A. Chase 1992:40-41) also implies some political authority, as does the suggestion that these groups may have served a variety of administrative roles (Ball and Taschek 1991:158, Bullard 1960:368; 1964; Culbert 1974.60, 66-68; Ford 1991:40; Hammond 1975a:41-42, 1975b:113-114, 1982:168; Marcus 1983:469; Puleston 1983:25; Rice and Puleston 1981:143; Thomas 1981:108; Tourtellot 1970:410; Willey and Bullard 1965:369; Willey et al. 1955:25; Willey et al. 1965:579), or at least acted as mediaries or "articulators" between the ruling aristocracy and the farming population (Iannone 1993a:5, 1993b:14). Thus it seems probable that, by definition, a "*middle stratum*" of lesser nobles and wealthy commoners did exist in ancient Maya society. With reference to this possibility, G. Marcus (1992:293) has recently stated that "[t]he existence of such groups certainly will not be a surprise to any anthropologist or historian who has studied classic kingship and aristocratic societies globally."

It should be stressed that the presumed middle stratum did not form "an actual group functioning in society" (Raynor 1969:7). Nor should it be considered "a solid or homogeneous group" (Raynor 1969:11, emphasis mine). Rather, the posited middle stratum of ancient Maya society consisted of a heterogeneous assemblage of social players and groups which shared *similar* economic, status, and power characteristics (power in Weber's restricted sense). This heterogeneous middle stratum is thus best viewed as consisting simply of individuals and groups situated in a mediary position within the milieu of ancient Maya social relations. Clearly, due to this mediary position, these groups would have shared a similar habitus (see Bourdieu 1977). They would have therefore been socially mediary with reference to the upper and lower strata of ancient Maya society.

Faction

The fourth social unit emphasised in this analysis is the faction (Figure 2.4). Factions are only recently beginning to be re-examined as potentially profitable units for investigation. Factions are defined as "structurally and functionally similar groups which, by virtue of their similarity, compete for resources and positions of power or prestige" (Brumfiel 1994:4). According to Brumfiel, factions can form within "a kin group, ethnic group, village or chiefdom." Concomitantly, "both intra- and inter-community interactions are essential in faction building" (Clark and Blake 1994:19). Factions are primarily political organisations (Brumfiel 1994; see also Nicholas 1965:23, 28; Runciman 1989:24), and are, for the most part, ephemeral associations (Bujra 1973, Table 1; Nicholas 1965:28). The characteristics of factions have been succinctly summarised by Brumfiel (1994; see also Bujra 1973, Table 1; Nicholas 1965:27-29): (1) factions are "informal " groups of primarily political orientation; (2) factions form, and inevitably clash with similar factions, for control over resources, prestige, and power; (3) group members are recruited and sustained by self-aggrandizing leaders; (4) these leaders usually derive from the "dominant" segments of society, as these individuals are better positioned to amass the resources required to mobilise a large following; (5) membership derives from a heterogeneous socio-economic base, followers generally having little in common except their factional membership; (6) vertical ties between the leader and followers are strong, whereas horizontal ties between the followers themselves are weak; (7) membership is fluid, with individuals joining or leaving the faction based on the success of its leader; and (8) the faction lacks "corporate property".

Factions do not exist without other factions (Nicholas 1965:27), and conflict between factions occurs on a regular basis (Brumfiel 1994:4; Nicholas 1965:23, 27). This conflict is aimed at "achieve[ing] a favorable allocation of existing benefits; each faction hoping to gain more while its competition gains less" (Brumfiel 1994.5). Due to the consistent occurrence of such conflicts, factions are considered to be important units for social transformation (Brumfiel 1994:3).

In contrast to the horizontal divisions of society previously discussed (ranked statuses, castes, and strata), in which group members share certain socio-economic, socio-political, and in some instances socio-ideological traits, factions are considered to be vertical societal divisions "which unite members of different strata and foster conflict

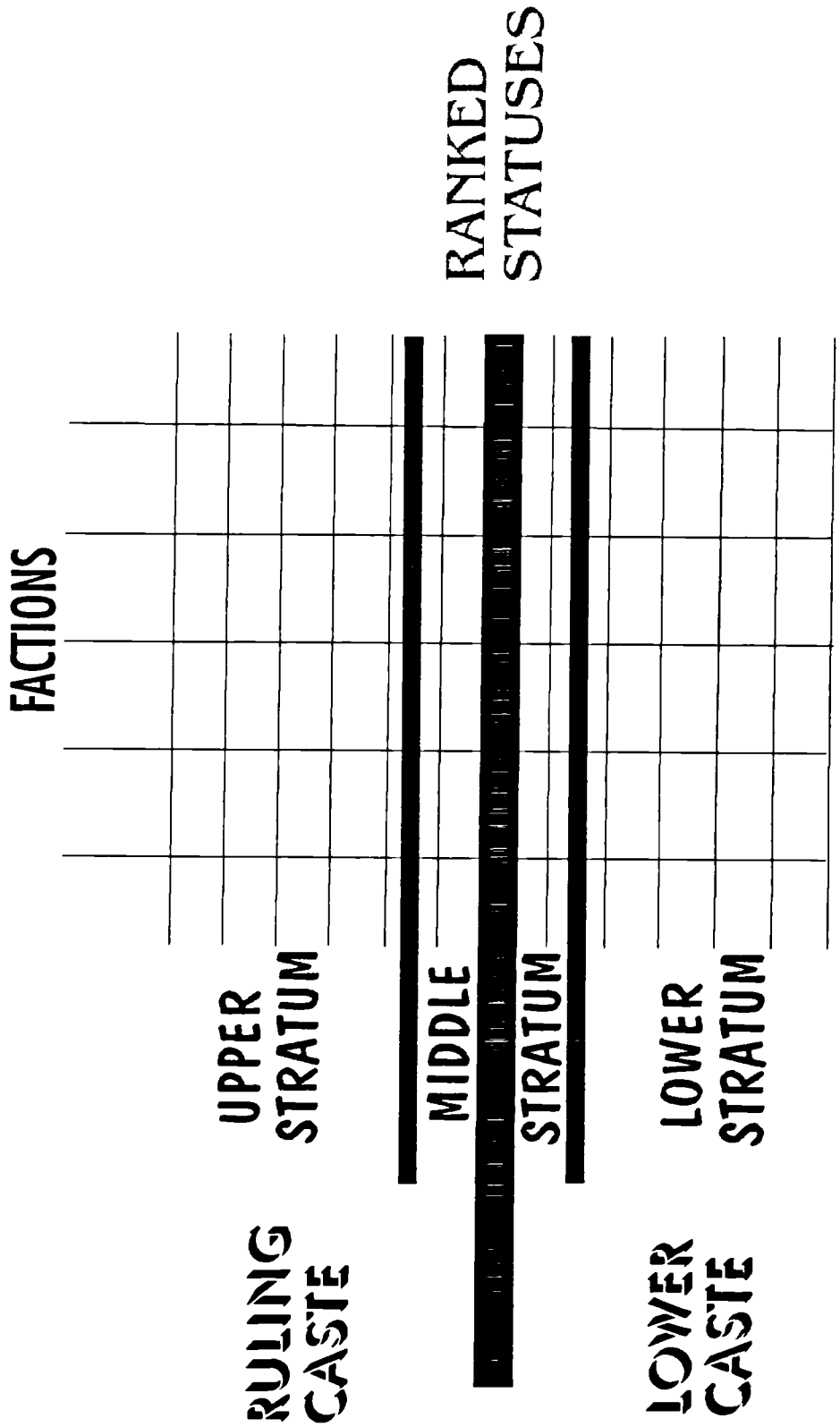


Figure 2.4. Schematic model of ancient Maya society showing ranked status, caste, stratum, and faction divisions

between members of the same strata" (Brumfiel 1995.8) Thus conflict between strata or castes is diametrically opposed to factional conflict. This distinction is profitable, and the incorporation of factional analysis contributes a further dimension to the developmental model.

Archaeological Correlates of Factions. Brumfiel (1994:10-12) outlines a number of archaeological correlates for factions. These include: (1) an increase in "prestige goods [exotics or items of high quality workmanship], preferred foods, and feasting paraphernalia"; which represent the expansion of ties with groups outside the immediate region, vertical linkages between leaders and their followers, and alliance building with other factions, (2) an increase in marriage alliances (which is hard to recognise except when documentation exists, e.g. Maya stelae); (3) an increase in the size and elaboration of the faction leaders household unit; (4) an increase in the size of other households, particularly those that participate in the production of items employed in faction building (e.g. feasting), (5) an increase in "forced settlement" (either centralising or dispersing) as a means to control "local rivals"; (6) an increase in projects suggestive of "communal labour", such as terrace systems, raised fields, or causeways; all of which lead to the increased production of feasting goods (e.g. intensive agriculture) or elaboration in ritual presentation (e.g. causeways); (7) an increase in the construction of, and overall prominence given to monumental architecture, particularly those structures which emphasis faction strength (e.g. fortifications), ideological connections (e.g. ancestor shrines), or overall size (e.g. public architecture), and (8) an overall increase in all aspects related to warfare.

Factions in Ancient Maya Society. Pohl and Pohl (1994) have recently applied a factional analysis to the Maya. They see factional conflict between "elites" occurring within lineages, between lineages, and between polities (Pohl and Pohl 1994:138, 156-157). Pohl and Pohl (1994.152) suggest that factional conflict is evident as early as the Late Formative period (350 B C. - 250 A.D.), when the abandonment of a number of large Maya centres (e.g. El Mirador) occurred. Factional conflict, as evidenced by increased warfare, continued throughout the Classic (250 - 900 A D.), and Postclassic periods (900 -1520 A.D.), and persisted well after the Spanish conquest. According to Pohl and Pohl (1994.144) "through rituals, elites laid claim to land titles, political positions, and prestige. These resources were the focus of intense competition among the ruling class " As a result, marriage alliances were contracted, as evidenced by much

of the epigraphic data, but these often led to further conflict (Pohl and Pohl 1994.144, 151) "Commoners" were also manipulated to increase the power of the faction, and fortifications were erected as conflict escalated. In the end, Pohl and Pohl consider many of the characteristics of Maya society as having derived from factional conflict. Following this observation, the inclusion of factions as a unit of social analysis seems logical.

Prior to preceding, it should be mentioned that some ethnohistoric data exists to suggest that lineages cross-cut caste and strata divisions in a similar fashion to factions (see Carmack 1981:156-161; Miles 1957:768; Roys 1957.5). Carmack has ascribed this tendency to the presence of segmentary lineages. Although sharing a similar name, the members of such a group would derive from numerous sectors of society, again resembling a faction. However, their relative permanence, as a "kinship" group, suggests the absence of a primary characteristic of factional association. In the end, the archaeological isolation of kinship connections within such a heterogeneous kinship grouping seems unlikely, and the use of such a social group for archaeological analysis is ruled out by this fact.

Corporate Group

The final social group considered relevant to the present study is the corporate group (Figures 2.5). As Brumfiel (1994:4) has noted, factions have been "explicitly or implicitly" differentiated from corporate groups (see also Hayden and Cannon 1982:135; Nicholas 1965:28). One of the primary distinctions is that factions are comparatively ephemeral, whereas corporate groups are "enduring" (Nicholas 1965:28). It is ultimately "conflict" that keeps factions alive (Nicholas 1965 30). Similarly, factions do not hold corporate property (Brumfiel 1995), whereas the control of such property or resources is a fundamental attribute of corporate groups (see below). In most basic terms, Weber (1947:145) has defined a corporate group as being "a social relationship which is either closed or limits the admission of outsiders " However, he does add that "by no means [is] every closed communal or associated relationship ..a corporate group. Whether or not a corporate group exists is entirely a matter of the presence of a person in authority, with or without an administrative staff" (Weber 1947:146)

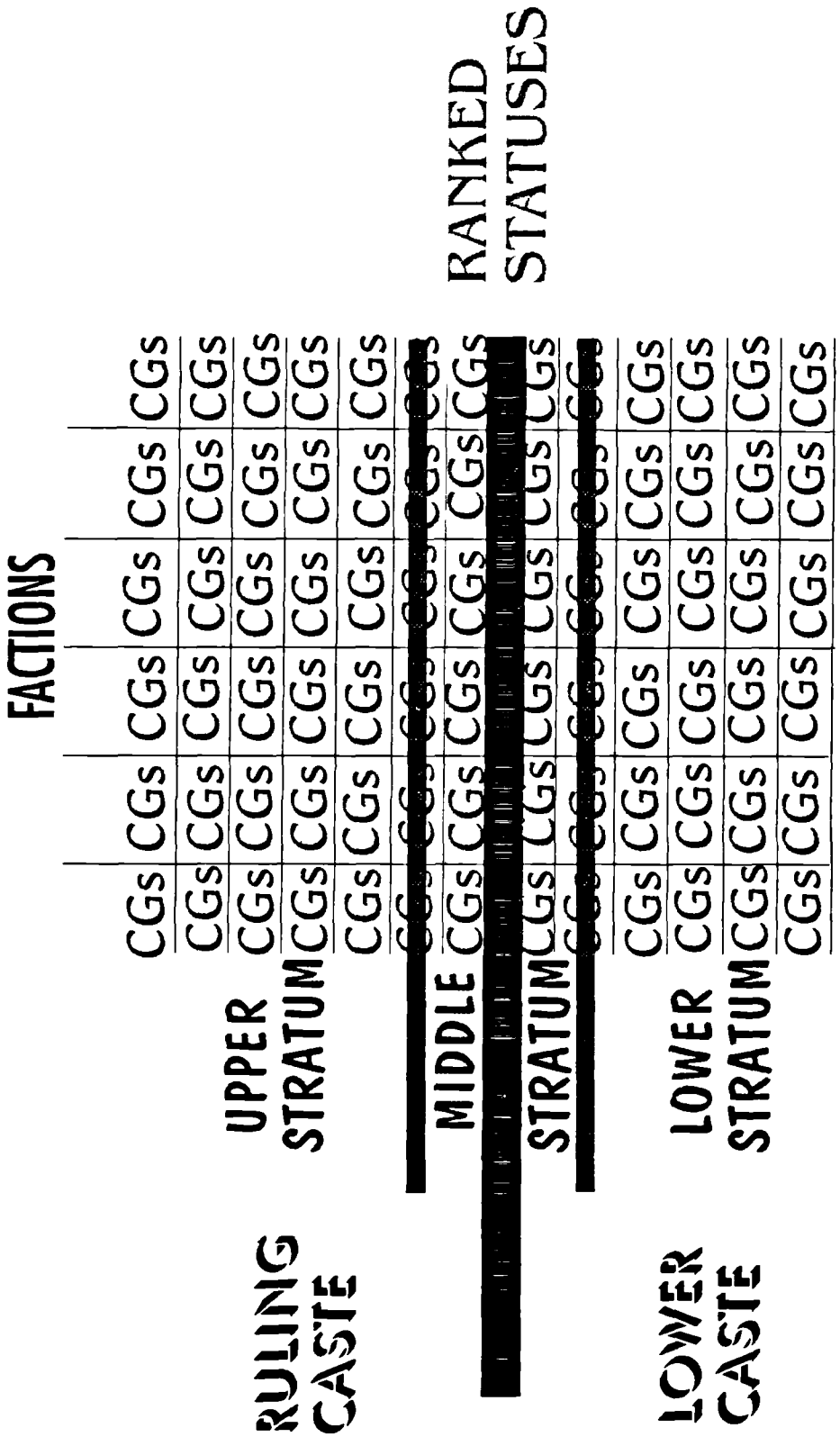


Figure 2.5. Schematic model of ancient Maya society showing ranked status, caste, stratum, faction, and corporate group (CGs) divisions

Hayden and Cannon (1982) have provided the most thorough discussion of the relevance of corporate groups to archaeological analysis. They emphasise that although groups varying in size from nuclear families to whole communities have been called corporate groups in the anthropological literature, the term is best reserved for social units lying between these two extremes. One of the fundamental points these authors make is that archaeologists will reap the most rewards if they focus on the identification of a specific type of corporate group, the "residential corporate group". According to Hayden and Cannon (1982:135) residential corporate groups can vary in their strength or cohesion. They proceed to define three basic types of residential corporate group (Hayden and Cannon 1982:142-147). The "multifamily structure" consists of numerous nuclear families all residing together in one, large dwelling. In some instances a number of these structures may coalesce into a larger community. The "clustered household" consists of a number of family dwellings situated in close proximity to each. More often than not they are situated in a patterned fashion (e.g. sharing a courtyard or patio). Finally, the "neighbourhood" is a large corporate group which includes numerous family dwellings as well as special function structures. These "specialised structures" are the loci for "corporate group affairs" (e.g. religious, economic, administrative, educational). The presence of neighbourhood residential corporate groups may be confirmed by the "reduplication" of special function structures at different loci within a larger community.

The importance of residential corporate groups for the study of social organisation has been stressed by Hayden and Cannon (1982). They argue that "residential corporate groups are...closed and exert a pervasive influence on all aspects of individuals lives, including their marriage, their postmaritial residence, their economic production, their feasting and celebrations, and their pastimes and pleasure" (Hayden and Cannon 1982 134). Additionally, "there is always some sort of administrative or authoritative hierarchy which directs major decisions concerning corporate groups (Hayden and Cannon 1982:148). Thus, corporate groups are internally ranked (Figure 2.6). Social competition between "aggrandizers" or "accumulators", primarily realised through competitive feasting and the control of natural resources and trade, is again considered the prime motivation for the formation of corporate groups (Hayden and Cannon 1982, Hayden and Gargett 1990). As Wason (1994:44) has reaffirmed, corporate kin-groups may be extremely important in the initial development of ranked societies, as they provide support for "potential leaders".

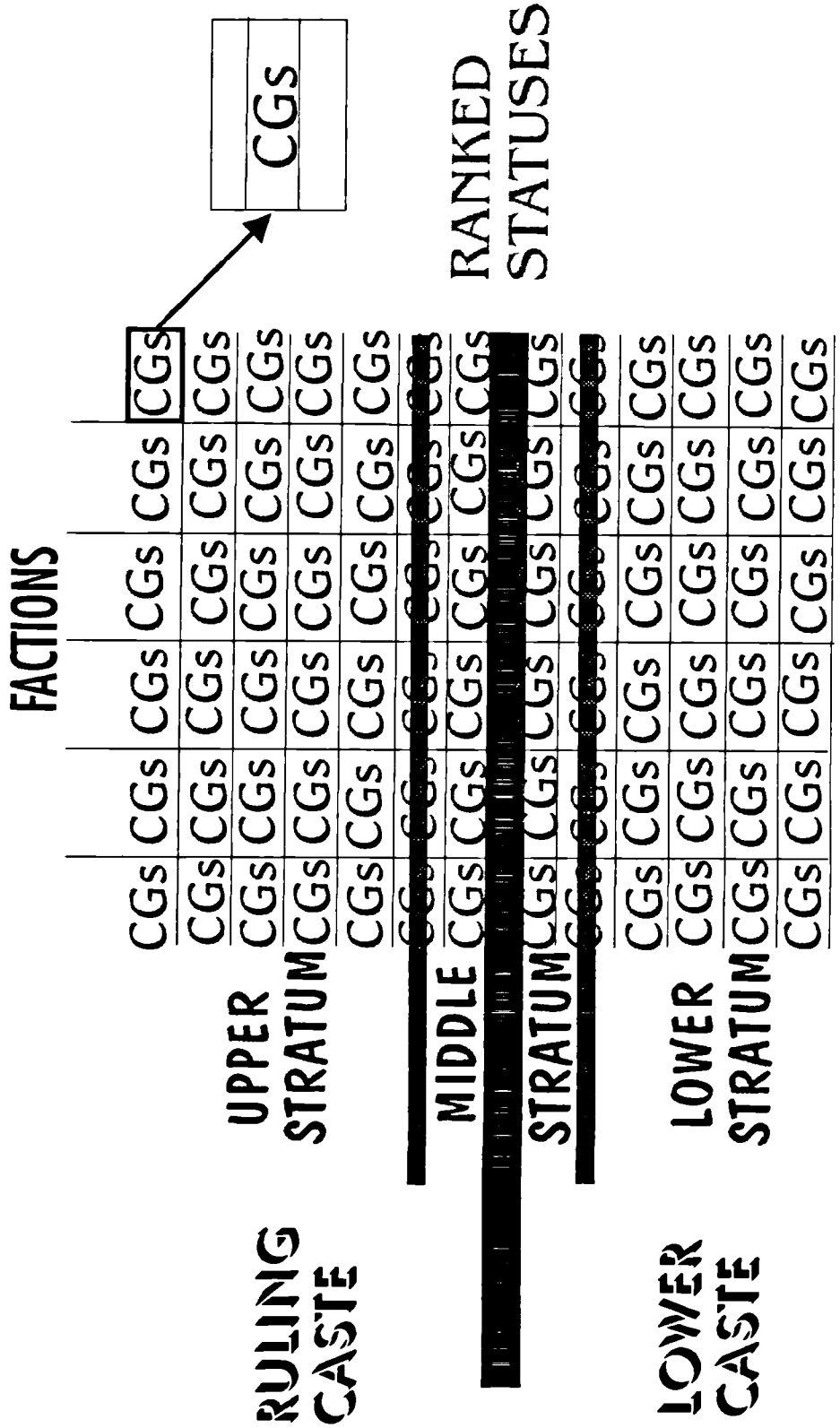


Figure 2.6. Schematic model of ancient Maya society showing ranked status, caste, stratum, faction, corporate group (CGs), and internal corporate group divisions.

Archaeological Correlates of Corporate Groups. Hayden and Cannon (1982 152) have presented a number of criteria for use in the archaeological recognition of residential corporate groups: (1) large numbers of households or group members; (2) the relative size of the structures and residential areas; (3) the presence of trade items; (4) intra-site or intra-structure differences in status; (5) the patterning and proximity of structures (for multifamily and clustered household corporate groups); and (6) the presence of special function structures (for neighbourhood corporate groups).

Corporate Groups in Ancient Maya Society. Hayden and Cannon (1982) have provided evidence for clustered household and neighbourhood corporate groups in contemporary and pre-Columbian Mesoamerica. Conlon (1995) and Hendon (1991) have discussed the importance of ancient Maya corporate groups within the Baking Pot and Copan peripheries respectively. McAnany's (1993; 1995) heterogeneous households and multifamily residential compounds are also indicative of the presence of corporate groups (see Chapter 1). McAnany (1995:122, 123) confirms that these residential corporate groups were internally ranked. She also argues that there was often competition between these social groups (McAnany 1995:151).

In sum, it is likely that a complex interplay of a various social units (ranked statuses, castes, strata, factions, and corporate groups) combined to form ancient Maya society. Any consideration of ancient Maya social organization must take this into account. The following discussion outlines a comparative method which should facilitate the recognition of these diverse social groups. In keeping with the "social theory" emphasis of this interpretive framework, a series of bundled continua of power, graded in degrees of "power to" and "power over", are presented as a means through which rigorous data comparisons can be carried out.

CONTINUA OF SETTLEMENT, CONTINUA OF POWER

> *Maya society was a tapestry of power relations that were negotiated at many different levels from the polity to the lineage and the residence* [McAnany 1995.123]

Symbolic interactionism, in its basic form, has never adequately addressed the topics of social organisation and social structure (Meltzer et al. 1975.99) Nor has it

been able to deal sufficiently with the concepts of power (Collins and Makowsky 1993:183; Denzin 1992.20) or stratification (Collins and Makowsky 1993 183). In refined editions, symbolic intertactionists have begun to rectify these weaknesses. For example, Shibutani (1986:7) has emphasised that the majority of social transactions are "goal oriented". Similarly, Heiss (1981:303) has stated that symbolic interactionists assume that a "human's prime goal is the seeking of rewards and the avoidance of costs...humans seek profit." Significantly, he tempers this statement by stressing that symbolic interactionists do not "assume that we necessarily seek immediate gratification, and they realise that there are many kinds of rewards and costs." He adds that "the value assigned to a thing by a particular person is a function of his or her previous experience." The addition of these tenets partially remedies the inherent weaknesses of a symbolic interactionist or mutualist approach. However, an influx of further social theory is required to render this formulation fully operational.

If one maintains that the social transaction is the elemental social unit, the quest for "power" can be deemed the basis of all social transactions. It is important to stress that in making this statement I do not ascribe to the strict definition of power employed by some, who see power as *purely* a process of domination (e.g. Weber 1962:117, see above; see critiques in Boulding 1989:16; Giddens 1979:69, 89, 92). Rather, I prefer to use power in a broad, multidimensional sense, following the thinking of social analysts such as Boulding (1989), Bourdieu (1977), Foucault (1977; see also Foucault in Rabinow 1984:60-61), Giddens (1979, 1982), Gosden (1994), and Shanks and Tilley (1987:71-73). The analysis of power is "integral" to the study of social relations (Giddens 1979:53-54). In fact, some social scientists, such as Giddens (1979.68), see power as the central "concept" in social theory (see also Shanks and Tilley 1987:70). Unfortunately, according to Giddens (1979 68), power as a focus of investigation has rarely received the attention that it deserves

According to Boulding (1989:16), it is misguided to associate power strictly with force, and thus domination (see also Shanks and Tilley 1987:71-73). He outlines that force and domination are only limited aspects of power (Boulding 1989.16). Foucault (in Rabinow 1984 60-61) concurs, arguing that "what makes power good, what makes it accepted, is simply the fact that it doesn't only weigh on us as a force that says no, but that it traverses and produces things, it induces pleasure, forms knowledge, produces discourse." Foucault stresses that power "needs to be considered as a productive

network which runs through the whole social body, much more than as a negative instance whose function is repression " Boulding (1989:15) states that power, in its "widest meaning" refers to the "potential for change." Giddens (1979:91) adds that "the exercise of power is instantiated in action, as a regular and routine phenomenon". According to Giddens (1979:88) "action involves intervention in events in the world, thus producing definite outcomes, with intended action being one category of an agents doing or refraining. Power as transformative capacity can then be taken to refer to agent's capabilities of reaching such outcomes". He argues further that , "power in social theory...is centrally involved with human agency; a person or party who wields power could 'have acted otherwise'; and the person or party over whom power is wielded, the concept applies, would have acted otherwise if power had not been exercised" (Giddens 1979:91). Giddens (1979:6, 88-94, 1982:32) therefore sees power as being fundamentally linked to the processes of autonomy and dependence.

Boulding (1989:24) postulates that the "consequences" of power can be separated into three broad categories; "destructive power", "economic power", and "integrative power". A similar tripartite construct has recently been suggested by Yoffee (1991:287) It is essential to emphasise here that all three aspects of power are closely linked (Boulding 1989:9, 80). Boulding (1989:24-25) defines destructive power as "the power to destroy", economic power as the power to produce, and integrative power as the ability to "build organizations, to create families and groups, to inspire loyalty, to bind people together, to develop legitimacy." The importance of integrative power has previously been stressed by Durkheim (1984 [1893]) in his discussion of the division of labor, Bourdieu (1977:177-179) in his summary of alliance networks, and Giddens (1979:76) in his overview of "interdependence of action".

It is integrative power, suggests Boulding (1989:10), that is not only the least studied, but also the "most significant form of power". This is because integrative power creates legitimacy, something which the other forms of power are unable to do. Boulding (1989:32) sees integrative power as "a matter of communication." He suggests that as groups get larger communication becomes "increasingly difficult", which in turn leads to inequalities in decision making and knowledge distribution (Boulding 1989:42-43; see also Bourdieu 1977:165). These processes create hierarchies of power "which cannot survive unless [they] can be legitimated" (Boulding 1989 44). He concludes that "legitimacy applies to persons, to roles and occupations, to organizations,

customs, habits, means of communications, institutions - indeed there is hardly any aspect of society the development and future of which are not profoundly determined by its position in the constantly changing structure of legitimacy" (Boulding 1989:113).

It should be clear, given the aforementioned statements, that power is both a universal and multidimensional element within social interaction Two key issues should be stressed here. First, it is generally accepted that power (in its broadest sense) is inherent in all social transactions (Foucault 1977; Foucault, in Rabinow 1984:60-61; Giddens 1979:6, 53-54, 80-82, 88; Miller and Tilley 1984:5-9). Second, although all agents are perceived to have power in all relationships (Giddens 1979 6, 93, 1982:32), it is assumed that over time power has become unequally distributed (Boulding 1989:21). In summary, because power is inherent in all social transactions, and due to its unequal distribution, any analysis which focuses on power will promote the characterisation of social relations. Ultimately, such an understanding increases our ability to address the broader question of social organisation.

What remains to be discussed is a method for applying the concept of power to the archaeological data. In order to approach the analysis of power relations, and by association social relations, in a rigorous manner, I suggest that Mayanists employ Easton's (1959.239) concept of bundled continua. This makes a great deal of sense, since the data we are looking at does not come in discrete units, but rather by way of a series of continua (e.g. Adams and Jones 1981.308, Grove and Gillespie 1992:191; Haviland 1965:23, 1966a:627-628, 1966b:31; Iannone 1993a:10-14, 1993b:1, 1993c:8; Sharer 1993:94). The bundled continua approach has been employed with some success in the Maya area by de Montmollin (1989) in his recent "Durkheimian" study of the Rosario Polity. The focus of de Montmollin's (1989:16-17) examination is primarily political, and therefore his analysis concentrates on the following "bundled continua of variation": (1) segmentary vs. unitary structure, (2) pyramidal vs. hierarchical regime, (3) group vs. individual stratification, (4) mechanical vs. organic solidarity, and (5) segmenting vs non-segmenting organisation. As the examination of social organisation is concerned with more than just politics, de Montmollin's bundled continua are not adequate for the current analysis.

To begin with, any social analysis should commence on a very basic level. Given this stance, I suggest that Mayanists "scale" their continua in varying degrees of "power to" and "power over" (Benton 1981:176; see also McGuire 1992.132; Miller and Tilley

1984.5-9; Shanks and Tilley 1987:71). Secondly, rather than limit our analysis to a few continua, I propose that an inductive approach be exercised, whereby the continua arise from the data base itself This procedure will provide a much more multifaceted characterisation of the series of social relationships under investigation. Concomitantly, it is felt that in order to approach the analysis of power relations, and by association social relations, in a rigorous manner, the bundled continua of power employed during the analysis should be exhaustive, in order to encompass all the available data types. This follows Wason's (1994:34) suggestion that "a conclusion using several lines of evidence can often profit from somewhat tenuous individual connections." Similarly, it is also advantageous if the continua are not mutually exclusive. An inherent malleability is favorable in that every artefact or feature can be evaluated in a variety of different ways, each examination emphasising different attributes or contexts. Additionally, given the innumerable avenues of comparison available to the researcher, this approach facilitates the comparison of data sets produced through disparate collection procedures.

The resulting series of bundled continua have been gleaned from a number of different sources. Some of these are wide-ranging in scope (e g. Carr 1995; Trigger 1990; Udy 1959; Wason 1994), whereas others are more specific to the Maya subarea (e.g. Abrams 1994; Arnold and Ford 1980; Ashmore 1992; Becker 1992; A. Chase 1992; de Montmollin 1989; Ford 1981; Houston 1992; Kurjack 1976; McAnany 1995; Reents-Budet 1994; Stuart 1993; White et al. 1993; various papers in Chase and Chase 1992a), or Mesoamerica in general (various papers in Chase and Chase 1992a). In combination, a series of 104 continua of variation have been formulated. These have been bundled under ten general categories: (1) Osteological, Paleopathological, and Demographic Data (Table 1); (2) Mortuary Data (Table 2); (3) Artefacts: Status Markers (Table 3); (4) Cache Data (Table 4); (5) Artefact Data: Domestic Architecture (Table 5); (6) Iconographic, Epigraphic, Wealth, and Craft Specialist Data (Table 6); (7) Settlement Data (Table 7), (8) Architecture Data: Residential (Table 8); (9) Architecture Data: Nonresidential (Table 9), (10) Labour Data (Table 10).

By ordinally scaling these continua in varying degrees of "power to" and "power over", I believe that this comparative method will produce valuable insights concerning the relationships between the various social units inherent within ancient Maya society. Specifically, by moving from intrasite, to microregional, regional, and finally macroregional levels of comparison, the various social groupings previously discussed

(ranked status, caste, stratum, faction, corporate group) should become recognisable, and as a result, significant insights into ancient Maya social organisation should be produced. Regrettably, there is not sufficient time in this particular endeavour to discuss these continua in detail (a matter which I hope to rectify in the near future). Fortunately, most of these continua should be familiar to archaeologists who have struggled with the problem of elucidating social organisation.

SUMMARY

In summary, I would argue that in our endeavour to characterise ancient Maya social organisation we are better off focusing initially on fundamentals, rather than allowing our analyses to be governed by the tenets of overarching explanatory models. Power relations are fundamental to social transactions, and social transactions are fundamental to social organisation. Such a focus carries with it less conceptual baggage than do the models currently being employed by Mayanists. We need to concentrate on microregions and regions in their entirety, situating each settlement cluster in turn along the various "power" continua which emerge from the data. Then "power to" and "power over" comparisons can be made between the various social groupings within a given region. Only through this process will Mayanists be able to characterise ancient Maya social relations in a reliable way, and in turn address the broader question of overall social organisation.

OSTEOLOGICAL, PALEOPATHOLOGICAL, AND DEMOGRAPHIC DATA
1. Power to obtain better diet and nutrition
2. Power to "buffer" stress, avoid infection and trauma
3. Power to evade heavy or rigorous labour
4 Power to acquire elaborate body modifications

Table 2.1. Continua of power for osteological, paleopathological, and demographic data.

MORTUARY DATA
1. Power to expend more energy in mortuary rituals
2. Power to produce more elaborate grave forms
3. Power to inter larger quantities of grave goods
4. Power to inter larger varieties of grave goods
5. Power to inter "high status" grave goods
6. Power to inter grave goods of high quality workmanship
7. Power to inter grave goods of high quality raw materials
8. Power to inter elaborate or intricate grave goods
9. Power to inter grave goods of exotic raw materials
10. Power to inter exotically produced grave goods
11 Power to inter non-utilitarian grave goods
12. Power to include sacrificial offerings along with grave goods
13 Power to employ "higher status" body positions
14. Power over preferred grave location

Table 2.2. Continua of power for mortuary data.

ARTEFACTS: STATUS MARKERS
1. Power to acquire "elite" items
2. Power to acquire "sumptuary" items
3. Power to acquire large quantities of "elite" items
4. Power to acquire large quantities of "sumptuary" items
5 Power to acquire greater varieties of "elite" items
6. Power to acquire greater varieties of "sumptuary" items
7. Power to acquire "elite" items of high quality workmanship
8. Power to acquire "sumptuary" items of high quality workmanship
9. Power to acquire "elite" items of high quality materials
10. Power to acquire "sumptuary" items of high quality materials
11. Power to acquire elaborate or intricate "elite" items
12. Power to acquire elaborate or intricate "sumptuary" items
13. Power to acquire "elite" items produced from exotic materials
14 Power to acquire "sumptuary" items produced from exotic materials
15. Power to acquire exotically produced "elite" items
16. Power to acquire exotically produced "sumptuary" items
17. Power over the production of "elite" items
18. Power over the production of "sumptuary" items

Table 2.3. Continua of power for "elite" and "sumptuary" artefacts.

CACHE DATA
1. Power to produce elaborate cache forms
2 Power to acquire large quantities of cache items
3. Power to acquire wider varieties of cache items
4 Power to include "high status" items in caches
5 Power to cache items of high quality workmanship
6 Power to cache items of high quality raw materials
7. Power to cache elaborate or intricate items
8 Power to cache items of exotic raw materials
9 Power to cache exotically produced items
10 Power to cache non-utilitarian items
11. Power to include sacrificial offerings in caches

Table 2.4. Continua of power for cache data

ARTEFACT DATA: DOMESTIC ARCHITECTURE
1. Power to acquire larger quantities of artefacts
2. Power to acquire a larger variety of artefacts
3. Power to acquire "high status" items
4. Power to acquire items of high quality workmanship
5 Power to acquire artefacts of high quality material
6. Power to acquire elaborate or intricate items
7. Power to acquire items of exotic raw materials
8. Power to acquire exotically produced items
9. Power to acquire non-utilitarian items

Table 2.5. Continua of power for artefacts recovered from domestic contexts ("on floor" and "fill").

ICONOGRAPHIC, EPIGRAPHIC, WEALTH, AND CRAFT SPECIALIST DATA
1. Power to acquire iconographic items
2. Power to acquire epigraphic items
3. Power to acquire "wealth" items
4. Power over specialised craft production

Table 2.6. Continua of power for iconographic, epigraphic, wealth, and craft specialist data.

SETTLEMENT DATA
1. Power to produce larger and more complex settlements
2. Power over the distribution of population
3. Power over sections of improved land

Table 2.7. Continua of power for settlement data.

ARCHITECTURE DATA: RESIDENTIAL
1. Power to invest more energy in construction material acquisition
2. Power to produce a larger residence
3 Power to produce higher quality residential structures
4. Power to construct residences in prominent locales
5 Power to produce variable and complex residential plan
6. Power to produce a greater number and variety of ancillary structures
7. Power to produce special auxiliary residential features (platforms, barriers)

Table 2.8. Continua of power for residential architecture data.

ARCHITECTURE DATA: NON-RESIDENTIAL
1. Power to construct non-residential architecture
2. Power to invest more energy in raw material acquisition
3. Power to construct larger non-residential architecture
4. Power to produce higher quality non-residential architecture
5 Power to construct non-residential architecture in prominent locales
6. Power to produce variable and complex non-residential plans
7. Power to produce a greater number and variety of non-residential structures
8. Power to produce a greater number and variety of ancillary structures
9. Power to produce special auxiliary non- residential features (e.g. platforms, barriers)

Table 2.9. Continua of power for non-residential architecture data.

LABOUR DATA
1. Power over familial reciprocal labour for residential construction and elaboration
2. Power over familial reciprocal labour for non-residential construction and elaboration
3. Power over familial reciprocal labour for production of basic resources
4. Power over familial reciprocal labour for production of non-basic resources
5 Power over familial reciprocal labour for ritual activity
6. Power over familial contractual labour for residential construction and elaboration
7. Power over familial contractual labour for non-residential construction and elaboration
8. Power over familial contractual labour for production of basic resources
9. Power over familial contractual labour for production of non-basic resources
10. Power over familial contractual labour for ritual activity
11. Power over community contractual labour for residential construction and elaboration
12. Power over community contractual labour for non-residential construction and elaboration
13. Power over community contractual labour for production of basic resources
14. Power over community contractual labour for production of non-basic resources
15. Power over community contractual labour for ritual activity
16. Power over festive custodial labour for residential construction and elaboration
17. Power over festive custodial labour for non-residential construction and elaboration
18. Power over festive custodial labour for production of basic resources
19. Power over festive custodial labour for production of non-basic resources
20. Power over festive custodial labour for ritual activity
21. Power over corvée labour for residential construction and elaboration
22. Power over corvée labour for non-residential construction and elaboration
23. Power over corvée labour for production of basic resources
24. Power over corvée labour for production of non-basic resources
25. Power over corvée labour for ritual activity

Table 2.10. Continua of power for labour data (The following definitions derive from Udy 1959 [see also Abrams 1994:96-101] : *Familial Reciprocal Labour* = reciprocal labour relations within a circimscribed kinship group, *Familial Contractual Labour* = family reciprocal labour with the addition of some contracted specialists; *Community Contractual Labour* = community wide labour which exhibits contractual obligations and cross-cuts kinship groups; *Festive Custodial Labour* = labour is provided to a higher ranking, or more powerful individual or group in return for festive returns (e g. feasts), *Corvée Labour* = where labour is procured by high ranking or powerful groups without the requirement of reciprocation or payment.

CHAPTER 3

THE ZUBIN CASE STUDY: ECOLOGICAL AND CULTURAL SETTING

ENVIRONMENTAL HETEROGENEITY IN THE MAYA SUBAREA

The Maya subarea is composed of a highly diverse array of ecosystems. The central lowlands, the focus of this study, provides one example of this heterogeneity. Although past researchers often characterised the central lowlands as a homogeneous macroregion inherently lacking in natural resources (e.g. Meggers 1954; Rathje 1971), recent studies have concluded that this description is highly inaccurate. In fact, the central lowlands are now generally considered to be a highly diverse area with regard to flora and fauna, climate, topography, hydrology, relief, geology, and soils (see Adams and Culbert 1977; Fedick 1995:18; Hammond and Ashmore 1981:19; Rice 1993:31; Sanders 1977; Sharer 1994:20). Such heterogeneity has all sorts of implications for the study of agricultural systems (e.g. Fedick 1995, Fedick and Ford 1990; Ford 1990, 1991; Ford and Fedick 1992), general resource distributions, and trade patterns (e.g. Graham 1987).

ENVIRONMENTAL HETEROGENEITY IN THE UPPER BELIZE RIVER REGION

Within the central lowlands the upper Belize River region constitutes a distinct environmental setting (see Figure 1.2). Covering the area from the Guatemala border on the west, to the settlement of Cocos Bank on the east (Willey et al. 1965:23), the upper Belize River region is dominated by the Belize River, which flows across the centre of modern Belize in a north-easterly to easterly direction. Its two main tributaries, the Macal (or eastern branch), and Mopan (the western branch), coalesce roughly 2 km north of the modern town of San Ignacio (El Cayo). Just as it was to later provide an invaluable route for archaeologists travelling to the region, and beyond to the central Peten region of Guatemala, the Belize River undoubtedly facilitated travel from the Caribbean coast into the southern lowlands during ancient times (see Ford and Fedick 1992:36; Willey et al. 1965 23).

With regard to climate, the region conforms to the "drier subtype of the Humid Tropics" (Ford and Fedick 1992.36, see also Wright et al. 1959:viii). This environment is characterised by a mean annual rainfall of less than 2000 mm, and a mean annual temperature exceeding 24° C (Wright et al. 1959·viii) It should be noted, however, that the climate of the Classic period is considered to have been slightly moister and cooler (Rice 1993:23). Within the upper Belize River region proper, rainfall consistently averages 1250 mm per year (Wright et al. 1959:183). Two distinct seasons occur, one rainy (June to January), the other dry (February to April), with May being a transitional month (see Fedick 1995:18-19). During the dry season the region receives less than 25 mm of rain per month (Fedick 1995:25; cf. Wright et al. 1959:183). In contrast, during the wet season rainfall can exceed 200 to 250 mm per month (Fedick 1995:19; Wright et al. 1959:183).

For heuristic purposes, it is profitable to divide the upper Belize River region into three environmental zones, the alluvial river terraces, the foothills, and the uplands (see Fedick 1995; Fedick and Ford 1990; Ford 1990; 167-168; 1991:36; Ford and Fedick 1992; Wright et al. 1959:182; see Figure 3.1). The alluvial river terraces generally meet the foothills at a distance of ca. 4-5 km from the river, the latter in turn grade into an upland plateau ca. 300 m above sea level (Fedick 1995:18; Ford 1991:168). Both the limestone foothills and the uplands exhibit alternating gentle and steep slopes. Soil cover does vary, with at least half of the region benefiting from deep soils which drain slowly, but retain moisture during the drier periods (Wright et al. 1959:183). According to Ford (1991:168), the well-drained alluvial soils of the river terraces, and the similarly well-drained soils of the uplands, provided highly fertile agricultural settings. In contrast, the soils of the foothills are only "moderately" productive (Ford 1990:176, 1991:168). With reference to the latter, Ford (1990·176) has gone so far as to state that "there is reason to believe that residents in this zone could not have been self-sufficient agriculturally." Interspersed throughout the region are sections of poor soils, associated with swamps, and the savannah to the east of the valley proper (Fedick 1995; Ford 1991:168).

The upper Belize River region has been classified as a "Subtropical Moist Forest Life Zone" (Fedick 1995.19). Vegetation is characteristic of the "Quasi-Rainforest" (Ford and Fedick 1992:36), being dominated by broadleaf, "lime-loving species" (e g. Mahogany, Ramón, Cohune, Spanish Cedar, Zapote [sapodilla]; see Ford and Fedick 1992:36, Rice 1993.23; Willey et al 1965.23; Wright et al. 1959.287). Over the years

Figure 3.1. Map of the upper Belize Valley region showing the alluvial valley and uplands zones north of the Belize River (from Ford and Fedick 1991, Figure 2).

much of this forest has been cleared as a result of the harvesting of economic species (particularly the Mahogany), and the creation of farm plots and cattle pastures. Indications are, however, that the modern setting might not be all that different from the Classic period. Paleoliminological research has suggested that much of the lowlands were denuded of large forests at the height of the Classic period (Rice 1993:27).

This heterogeneous environmental setting is home to a diverse range of fauna, each species taking advantage of a certain niche in the vast array of microenvironments. Unfortunately, the faunal community has been diminished significantly over the years. I defer, therefore, to Willey's description of the region from the 1950s, which probably provides a more accurate picture of the Classic period faunal community:

> The fauna is rich. Several species of edible fish as well as turtles and alligators live in the river, although the last are now much depleted by hunting. The banks are roamed by jaguars, tapirs, deer, and a variety of smaller animals including peccary, agouti (tipisquintle or gibnut), coati-mundi (pisote), armadillo, and iguana. Spider and howler monkeys swing in the treetops. Birds occur in great variety and abundance, the principle edible species including the curassow (faisán), guan (cojolite), the chachalaca, and the occellated turkey, the last now scarce. Snakes are also common, and venomous species such as the "yellow-jawed-tommy-goff" (fer-de-lance) and the coral await the unwary man or beast [Willey et al. 1965:23].

REGIONAL CULTURAL SETTING

"Culturally", the upper Belize River region is considered part of the Central Zone (see Figure 3.2), in that it shares "Peten-influenced architecture and ceramics" (Hammond and Ashmore 1981.28). However, as will be discussed below, significant differences do exist which permit the upper Belize River region to be viewed as a distinct environmental *and* cultural setting These differences are reflected in the overall settlement pattern, as well as in other material culture expressions (e g monumental architecture, stelae).

Figure 3.2. Map of the projected cultural regions within the broader Maya subarea (from Hammond and Ashmore 1981, Figure 2.1).

Lower Level Settlement

Willey's early research in the region prompted him to conclude that most of the lower level settlements were situated on the alluvial terraces adjacent to the Belize River and its tributaries (Willey et al. 1955.21; Willey et al. 1965:24, 571-573; see comments in Ford and Fedick 1992:36-37; Yaeger and Ashmore 1993:2) "Bands" of high settlement density along the river terraces have also been recognised by other investigators (Ball and Taschek 1986.5). Recent research, however, has shown that settlement remains are also prevalent in both the foothill and upland zones (e.g. Ashmore 1993:11; Ashmore et al. 1993:4; Awe et al. 1990; Coe and Coe 1956:381; Willey and Bullard 1956:29; Willey et al. 1965:571; Yaeger and Ashmore 1993:2-3; for similar observations outside of the Belize Valley proper see Bullard 1960, 1964:281; Fash 1983:264; Ford 1981:145; Pyburn 1989:135; Thompson 1931:233, Tourtellot 1970:409).

The lower level settlement within the upper Belize River region is relatively simple, with solitary mounds predominating (Ford 1991:38; Ford and Fedick 1992:39). In fact, recent work by Ford and Fedick (1992:39), north of the Belize River, has shown that over 80% of the settlement is comprised of solitary mounds. They do note, however, that residential composition does vary with environmental zone (Ford and Fedick 1992:43). Their research indicates that less than 65% of the upland residential units are composed of solitary structures, whereas 90% of the alluvial terrace residential units are solitary (Ford 1990:175; Ford and Fedick 1992:43). However, it is also noted that the solitary structures in the uplands are generally smaller in size than those found on the alluvial terraces (Ford 1990:175).

Ford (1991:38-39) has also concluded that although the overall settlement density is quite high in comparison to adjacent regions (averaging 120 structures per km^2), it once again varies within the alluvial terrace, foothill, and upland environmental zones (see Ford 1990, 1991; Ford and Fedick 1992). Average densities along the river terraces ranged between 102 and 129 structures per km^2. In contrast, average densities in the foothills ranged dramatically, from 39 to 114 structures per km^2, with the higher densities apparently corresponding to the Late Classic period (see Ford 1990.176). Finally, average densities in the uplands ranged between 158 and 323 structures per km^2, with the higher densities occurring adjacent to terraced agricultural plots. Preliminary work in the periphery of Xunantunich has produced a comparable figure of 152

structures per km² in the uplands (Ashmore 1993.8). Ford (1991.39-40) notes that 87% of settlement occurs in the well-drained portions of either the alluvial river terraces, or the uplands, with only 13% of settlement occurring in the foothills

Middle Level Settlement

A number of middle level settlement units occur within the upper Belize River region (see Figure 1.2). Garber et al. (1993a:6) have asserted that sites of this size and complexity are generally situated "equidistant" between upper level settlements. More specifically, it appears that sites of this type are spaced roughly 2 km from each other (Ashmore 1993:12), or a similar distance from larger upper level settlements (J. Awe, personal communication 1994; Garber et al. 1993a, Figures 5, 6). This spacing is consistent with that recognised at other sites in the Maya lowlands. For example, Hammond (1975a:42) has indicated that "minor centres" are generally situated 1.75 to 2 km from the site core of Nohmul.

As has generally been recognised throughout the Maya lowlands (see Chapter 1), middle level settlements within the upper Belize River region exhibit a high degree of compositional variability. Similarly, sites of this type also occur in a variety of ecozones. A review of the literature indicates that they can be found in the alluvial valleys, uplands, and foothills. However, in contrast to the lower level settlement distributions discussed above, it has been noted that middle level settlements are particularly prevalent in the foothills zone, where they are commonly found on the crests of hills (Ashmore 1993:12; Awe et al. 1990; Ball and Taschek 1986:6; Willey and Bullard 1956:29). Thus, although the settlement density of the foothills is lower than in the other two zones, and the agricultural potential projected to be somewhat restricted in comparison (see above), a significant proportion of the larger administrative/ceremonial, or generally higher status settlement units appear to have been located within this zone.

Within the upper Belize River region a number of middle level settlements have received archaeological attention (see Figure 1 2), although in the majority of instances these studies have been limited in scope Investigations have been undertaken at BR-180 (Barton Ramie, see Willey et al. 1965), Spanish Lookout (Willey et al 1965), Bedran (Conlon 1993, 1995; Conlon et al 1994), and San Lorenzo (Yaeger 1994; Yaeger and LeCount 1995), all located on the lower alluvial river terraces. Explorations have also been conducted at Floral Park (Garber, personal communication 1994), and Bacab Na

(Ford 1990:169), situated on the higher river terraces. Finally, excavations and/or surveys have been undertaken at the foothill sites of Ontario Village (Garber et al. 1993a; Garber et al. 1993b), Yaxox (Ford 1990:169), Alta Vista (Ford 1990:169), Zubin (this volume), Zinic (Conlon 1992; Conlon and Awe 1991), X-ual-canil (Iannone 1995d), Nohoch Ek (Coe and Coe 1956; see also Ball and Taschek 1986, 1991), and in the vicinity of Chaa Creek (S. Connell, personal communication 1995).

Upper Level Settlement

Garber et al (1993a:4) have noted that, within the upper Belize River region, the upper level settlements are generally spaced ca 10 km apart, and that they increase in "size and volume" as one moves east to west (see Figure 1.2). As with the previously discussed middle level settlements, upper level settlements within the region are located in a variety of ecozones. Similarly, although some upper level settlements are situated on the alluvial terraces (see below), the majority are located within the uplands, and particularly in the foothills zone (e.g. Willey and Bullard 1956:29). Their presence in the latter again confirms the importance of this zone as a setting for the administrative, ceremonial and generally higher status settlement units, even though it is the foothills which appear to have had the lowest settlement densities, and only moderate agricultural potential (see above).

In comparison with the middle level settlements previously discussed, upper level settlements within the upper Belize River region have received much more archaeological attention (see Figure 1.2). The sites of Baking Pot (Bullard and Bullard 1965; Ricketson 1931), and Buena Vista (Ball and Taschek 1986, 1991), both located on the alluvial river terraces, have been investigated. Blackman Eddy (Garber et al 1993a, 1993b), Cahal Pech (Awe 1992; Awe and Campbell 1988; Awe et al. 1990; Awe et al. 1991; Cheetham 1995), Xunantunich (Ashmore and Leventhal 1993; Mackie 1985), and Los Ruinas (see Ball and Taschek 1986, 1991), situated in the foothills, have also been extensively studied. Finally, the uplands sites of El Pilar (Ford 1990, 1991; Ford and Fedick 1992; Fedick and Ford 1990), and Pacbitun (Healy 1990), have both been host to large scale archaeological projects.

The Belize Valley and the Broader "Central Zone"

As alluded to above, the upper Belize River region is considered to be part of the broader "Central Zone" (see Figure 3.2), given the presence of a number of architectural, artefactual, and presumably ideological traits, which are consistent with those of the central Peten region (see Hammond and Ashmore 1981). In general, although some researchers have argued for close ties between the two areas (e.g. Ashmore and Leventhal 1993), indications are that this was essentially a core/periphery relationship (see various papers in Champion 1989; and Rowlands et al. 1987). This is attested by a number of factors. For example, Garber et al. (1993a 3-5) have noted that upper level settlement in the upper Belize River region is quite distinct, characterised as it is by a number of closely spaced, *medium sized* major centres Ashmore (1993:6) has also pointed out that "material assertions of royal authority" are far less conspicuous in the upper Belize River region in comparison to adjacent regions (e.g. the Peten). A number of researchers have noted that monuments (e.g. stelae and altars), particularly those classifiable as "text-bearing portrait stelae" (Ashmore 1993:3), are relatively rare both in the Belize Valley (Ashmore 1993:6), and in Belize in general (Healy 1990). In addition, monumental architecture, as implied above, is also less prevalent (Ashmore 1993:6). Ashmore (1993:6) has concluded that "settlement in this region seems to have been less politically centralised and less developmentally tumultuous than was the case in adjoining areas."

THE CASE STUDY: ZUBIN, CAYO DISTRICT, BELIZE

Zubin is located in the upper Belize River region (Figure 1 2), approximately 2 2 km south of the medium sized major centre of Cahal Pech (Figures 3.3, 3.4) The site is situated in the foothills zone, upon an east-west running limestone ridge, and is separated from Cahal Pech proper by a small, restricted valley. *Zubin* is a Yucatec Maya term for *Acacia globlifera* (Roys 1931.312). These small trees, with their abundant thorns and resident fire-ants, overlay the entire site core upon arrival of project members in 1992. Having been part of a cattle pasture until three years prior to the commencement of our investigations, the primary architectural cluster had only recently been reclaimed by the acacia forest. Although no archaeological work had been undertaken at the site until our arrival, there were indications of looting activity (see Figure 3.5). However,

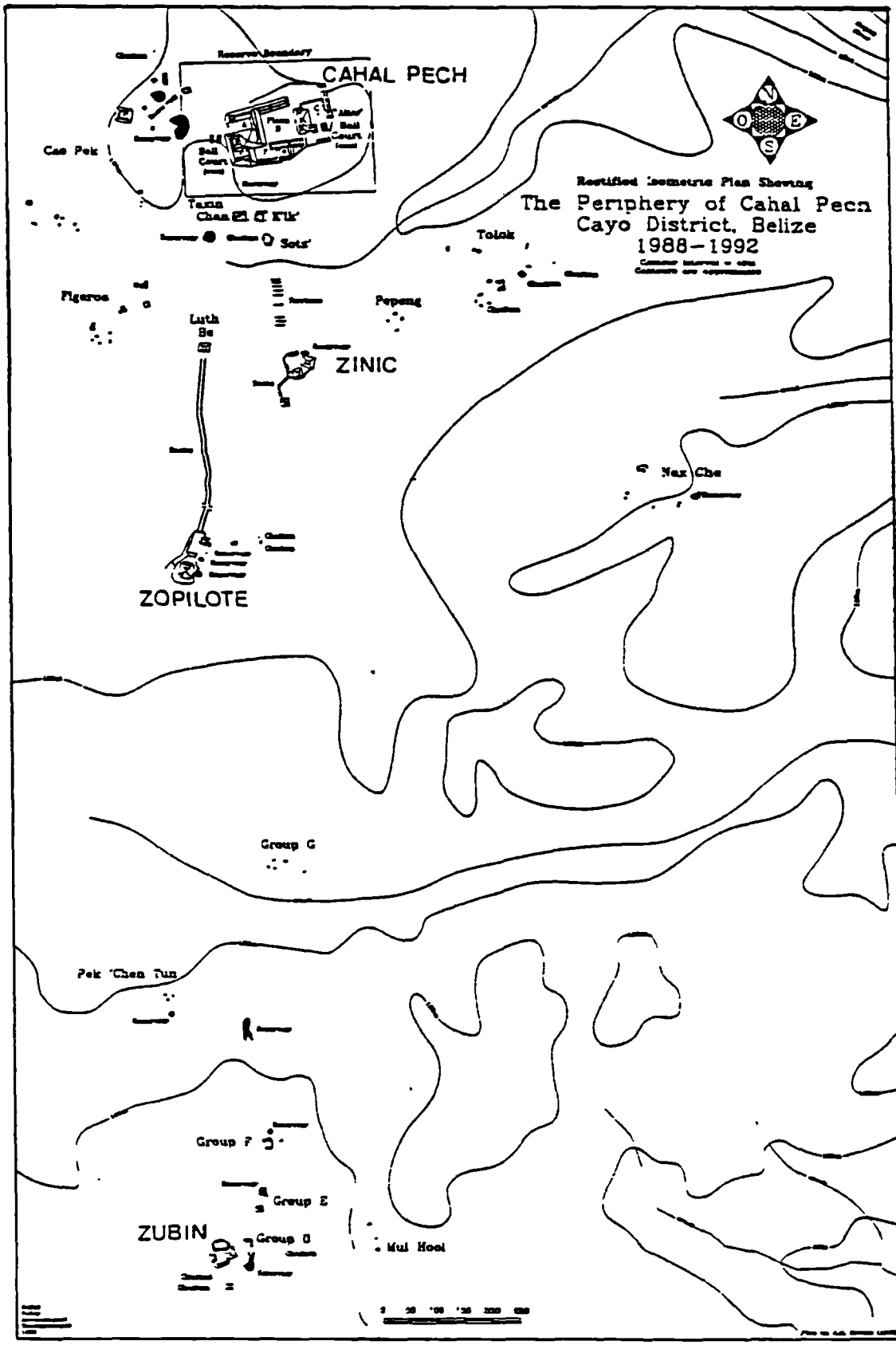


Figure 3 3 Map of Cahal Pech showing peripheral settlement and the location of Zubin.

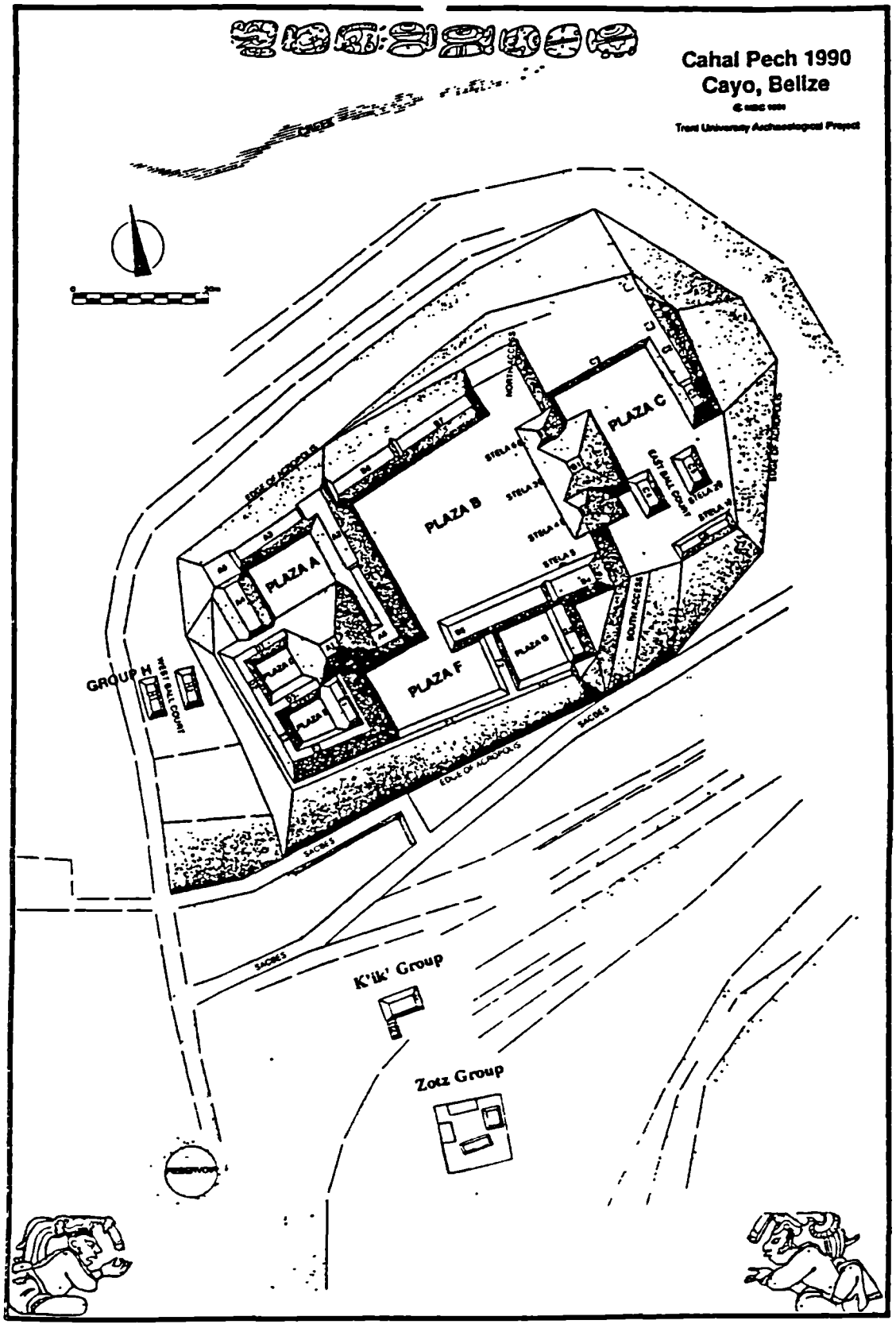


Figure 3.4. Rectified isometric plan of the Cahal Pech site core.

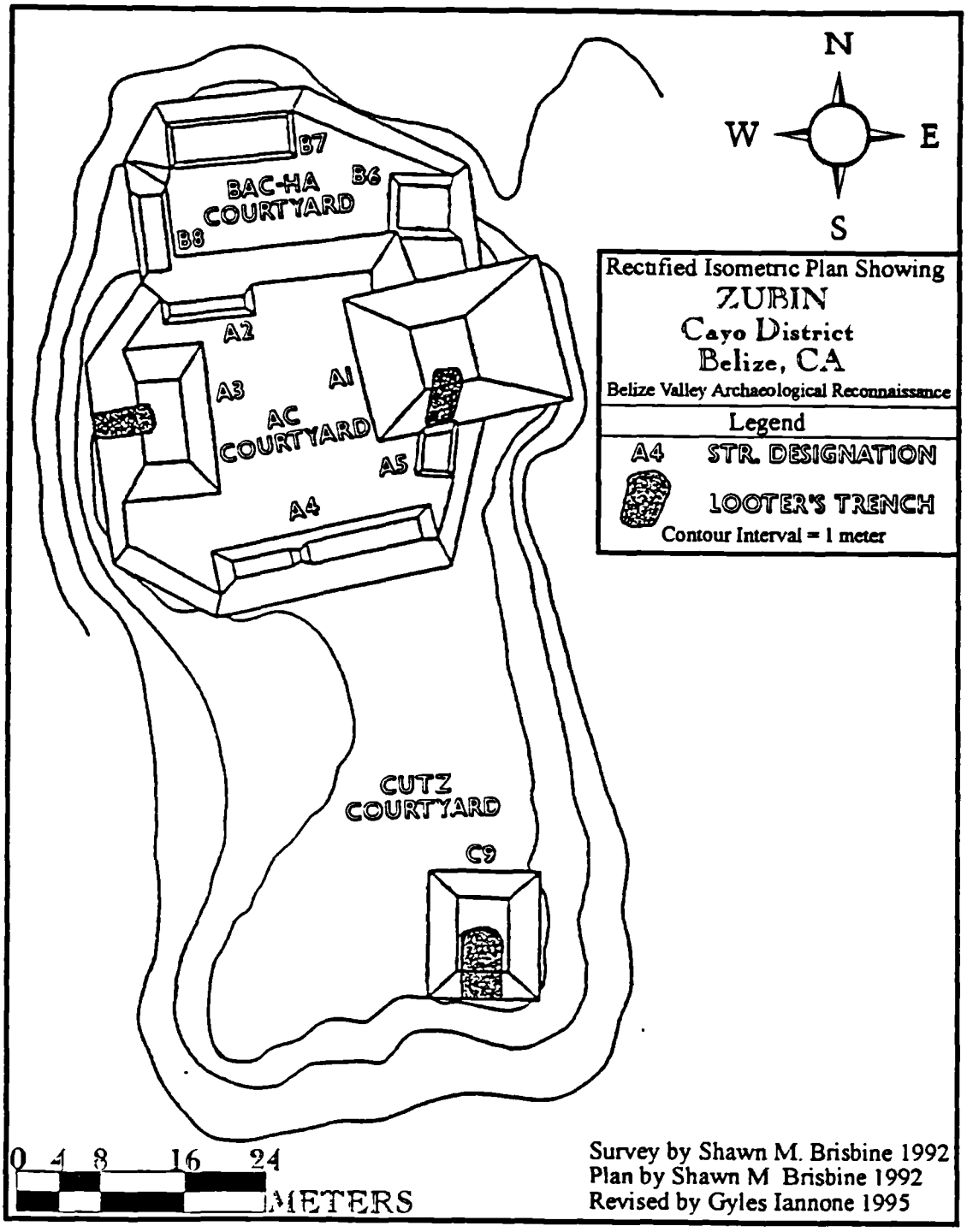


Figure 3.5. Rectified isometric plan of Zubin

according to one of the landlords, Alfredo Boitin, the mounds were not looted prior to 1989, when a caretaker began clandestine excavations at the site.

The core architectural assemblage consists of two restricted courtyards and an adjoining raised platform, the latter supporting a solitary pyramidal structure (see Figure 3.5). The architectural inventory comprises pyramidal, range-type, and other low-lying mounds. No vaulted structures occur. Surrounding this focal architectural assemblage are numerous smaller mounds and mound clusters (Figure 3.6), forming a continuum beginning with small solitary structures and concluding with a number of larger patio or plazuela-type configurations (see Ashmore 1981). A more detailed description of Zubin architecture will be provided in the following chapter (Chapter 4).

SUMMARY

For a number of reasons, Zubin was considered the perfect locus for middle level settlement investigations. With its two courtyards, adjacent raised platform, and numerous special function structures, Zubin readily conformed to both loose (Bullard 1960) and rigorous (Hammond 1975a) minor centre classifications. The group was considered "moderately complex" given the presence of some special function features (three pyramidal structures), and the absence of others (ballcourts, stelae). The existence of a relatively dense peripheral population was also seen to provide an excellent opportunity to explore the character of social relations as they existed between these social groups and the minor centre. Similarly, the nature of Zubin's socio-economic and socio-political relationships with more powerful and multifaceted social groupings remained open for investigation, given the site's clear spatial separation from the nearby major centre of Cahal Pech. Finally, given that concurrent investigations were being taken up by other project members within a wide range of settlement types within the Cahal Pech periphery, it was clear that an unprecedented comparative data base would eventually be available for assessing social relations on a microregional scale. In sum, the Cahal Pech microregion provided an ideal setting for the type of analysis proposed by the author. The upper Belize River region, with its long history of settlement archaeology, and abundance of comparative data, was also considered a fitting backdrop for the formulation of broader generalisations.

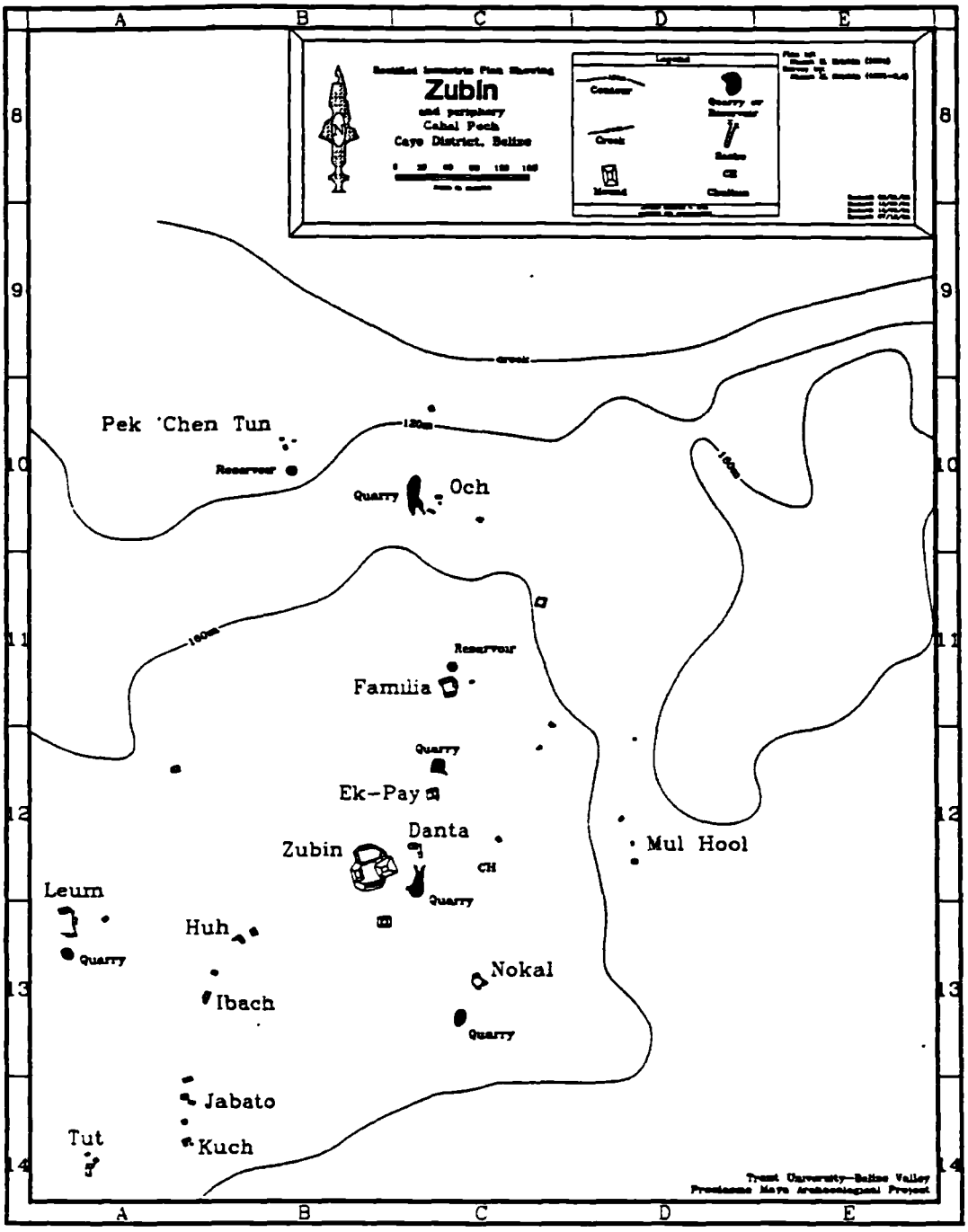


Figure 3 6. Map of Zubin showing peripheral settlement.

CHAPTER 4

EXCAVATION DATA I: ZUBIN ARCHITECTURE

The following two chapters summarise the results of three seasons (1992-1995) of detailed archaeological investigations at the ancient Maya minor centre of Zubin. The Zubin excavation design was specifically formulated to generate a representative, multifaceted, and temporally sensitive data base from the site core. The production of such a data base was deemed necessary for appraising the changing nature of activities undertaken at the site. This information was also considered essential for the accurate assessment of intra- and intersite social relations. This chapter is primarily concerned with architecture type, elaboration, and sequence of modification. The following chapter (Chapter 5) outlines the contents and location of ritual deposits (i.e., caches), and the location, structural elaboration, and inventory of graves. Through tables, graphs, and figures, Appendix III summarizes the Zubin material culture assemblage, and presents information pertaining to the general temporal and contextual trends reflected in the artefact collection. By cross-referencing with the artefact data bases in Appendices IV and V, the reader will be able to secure temporal and contextual data on all excavated artefacts. In combination, these sources (Chapters 4 and 5, Appendices III-V) present the "empirical" results of the Zubin investigations. Broader "interpretive" insights are summarized in the analysis chapter (Chapter 6).

EXCAVATIONS IN THE *AC* COURTYARD

Courtyard A or *Ac* (Male Peccary), the focal architectural assemblage at Zubin, is a highly restricted courtyard configuration (see Figure 3 5). The eastern mound, Structure A1, is a pyramidal structure with at least one small flanking mound abutting its south side (Structure A5). To the north, between Structure A1 and Structure B6, a formal entrance into the courtyard is hypothesised to exist. A very low-lying mound, Structure A2, partially closes off the courtyard to the North, although there appears to be an access to the adjacent Courtyard B (*Bac-ha)* to the east of this mound. An additional, yet smaller pyramidal mound, Structure A3, is located directly across from A1, and defines the western border of the courtyard. This construct rises approximately

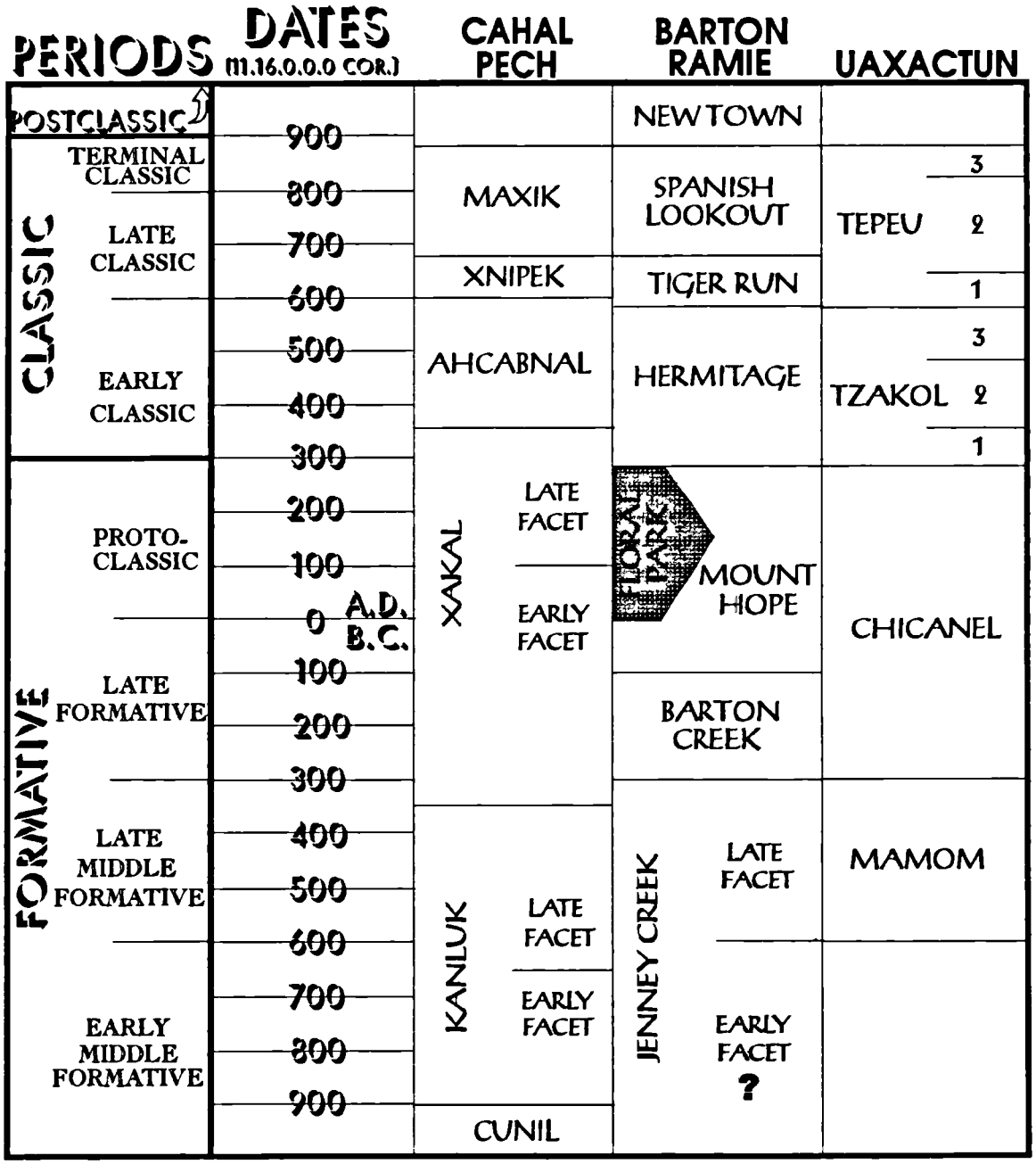


Figure 4 1. Chronology chart showing periods, dates, and related ceramic phases.

2.75 m above the *Ac* Courtyard, and substantially above the ground surface to the West of the site core A long, unvaulted, bi-level range-type construct, Structure A4, closes off the courtyard to the South. A second formal entrance into the courtyard is postulated to exist between Structures A3 and A4. Another more restricted access point existed at the eastern end of Structure A4. The dominant mound, Structure A1, rises approximately 5 m above the courtyard surface, and roughly 9 m above the normal ground surface to the East. There are no indications that any of the *Ac* Courtyard structures were ever vaulted. However, Structures A3, A4, and B6 have evidence for low masonry walls.

Structure A1 Operations

From the outset of excavations, Structure A1, given its morphology and location, was considered an excellent example of an eastern shrine structure. Excavations were to confirm this identification. Operations within this pyramidal mound focused on the excavation of an axial trench. The reasons for these investigations were two-fold. First, we wished to acquire data concerning the construction sequence in order to outline the development of this special function structure and its associated courtyards, as well as assess the quality of the architecture. Such information would facilitate intersite comparisons with regard to the timing of major structural modifications, and the amount of labour marshalled for such constructions. Second, the trench was placed along the primary axis in order to uncover any burials or ritual deposits which are normally deposited in this position. Such information was considered necessary for intersite comparisons to be made with reference to labour investment in burials and caches, and access to exotic or other high status items.

All levels were excavated in natural, or cultural, levels in order to maintain the vertical integrity of the artefacts recovered. Horizontal control over the spatial distribution of artefact assemblages was provided through the use of smaller units within the larger trench. Specifically, an 11x2 m axial trench, running east-west, was subdivided into four contiguous units (see Figure 4.2). Unit A1-2, a 3x2 m unit, was placed on the platform of the mound To the west of this Units A1-3 and A1-4, both 3x2 m units, were situated along the A1 stairs. Unit A1-5, a 2x2 m unit, constituted the

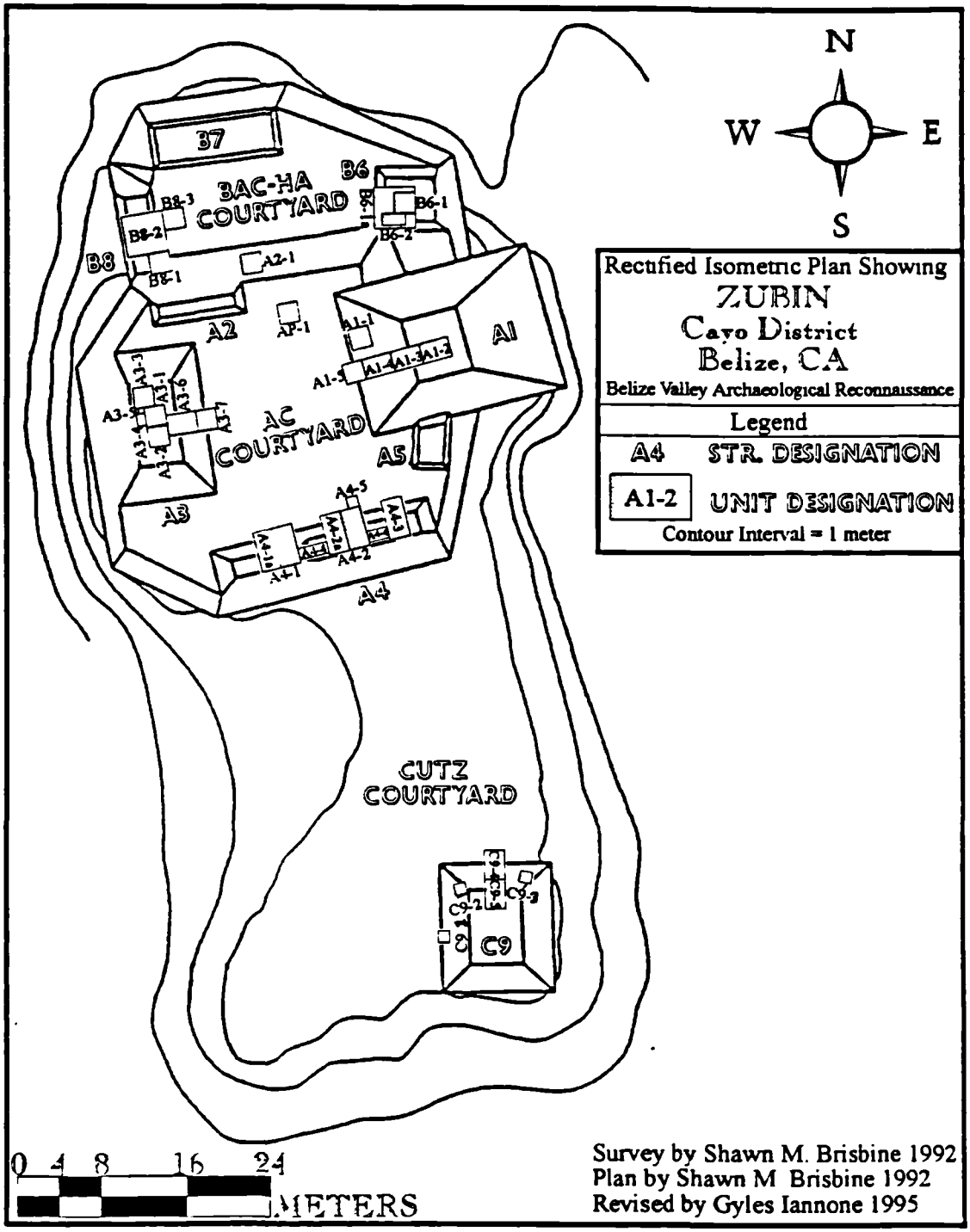


Figure 4.2. Rectified, isometric plan of Zubin showing the location of excavation units.

western extent of the trench, although only minimal excavations were undertaken within its boundaries.

Within the following discussions the larger trench will be considered the unit of analysis except when it is profitable to specify individual units with regard to the location of particular architectural components, artefact finds, or ritual deposits. All measurements of depth are below the trench datum, which was situated in the southeast corner of Unit A1-2. It should also be noted that due to the large, dry-stone core employed during the various A1 constructions, the walls of the trench soon became unstable, especially after heavy rains Thus we were unable to excavate the entire trench down to bedrock (see Figure 4 3). Where applicable it will be stressed that excavations were confined to specific units.

Level 7B. Level 7B, located at a depth of ca. 6.50 m below the trench datum, was only excavated within Unit A1-4 (see Figure 4.3). This deposit represented the original, undulating land surface (paleosol), as it rested directly on limestone bedrock. Varying from 10-14 cm in thickness, this deposit consisted of fine silty clays interspersed with small percentages of pebble sized (0.4-6.4 cm) sedimentary clasts. Compaction was moderate to high. Other than ceramic sherds, faunal remains, and lithic debitage, the only artefact of note recovered from Level 7B was the proximal section of an obsidian blade (A1-SF/251). Sherd content was moderate throughout the deposit. All ceramics date to the Middle Formative, Kanluk phase (900-350 B.C.). Members of the Savana and Joventud Ceramic Groups dominated the sample. A date of 650-350 B.C. is suggested for initial occupation of this land surface.

Level 7A. Level 7A, a subsequent ca. 20-34 cm thick sediment deposit, capped the initial 7b surface (see Figure 4 3). This deposit was again only exposed and excavated in Unit A1-4. It was encountered ca 6.36 m below the trench datum. Like Level 7b, 7a consisted primarily of silty clays, however moderate as opposed to small percentages of pebble sized (0.4-6 4 cm) clasts were now contained within the matrix. This deposit appears to represent an initial effort to provide a level living surface, although only minimal efforts were made to achieve this goal, as the inhabitants of Zubin were satisfied to employ simple sediments and refuse for this purpose. Besides numerous sherds, faunal remains, and lithic debitage, the distal section of an obsidian blade (A1-SF/252), and a unifacial chert drill (A1-SF/271) were recovered from this deposit. Ceramics from the Middle Formative, Kanluk phase (900-350 B.C.), including

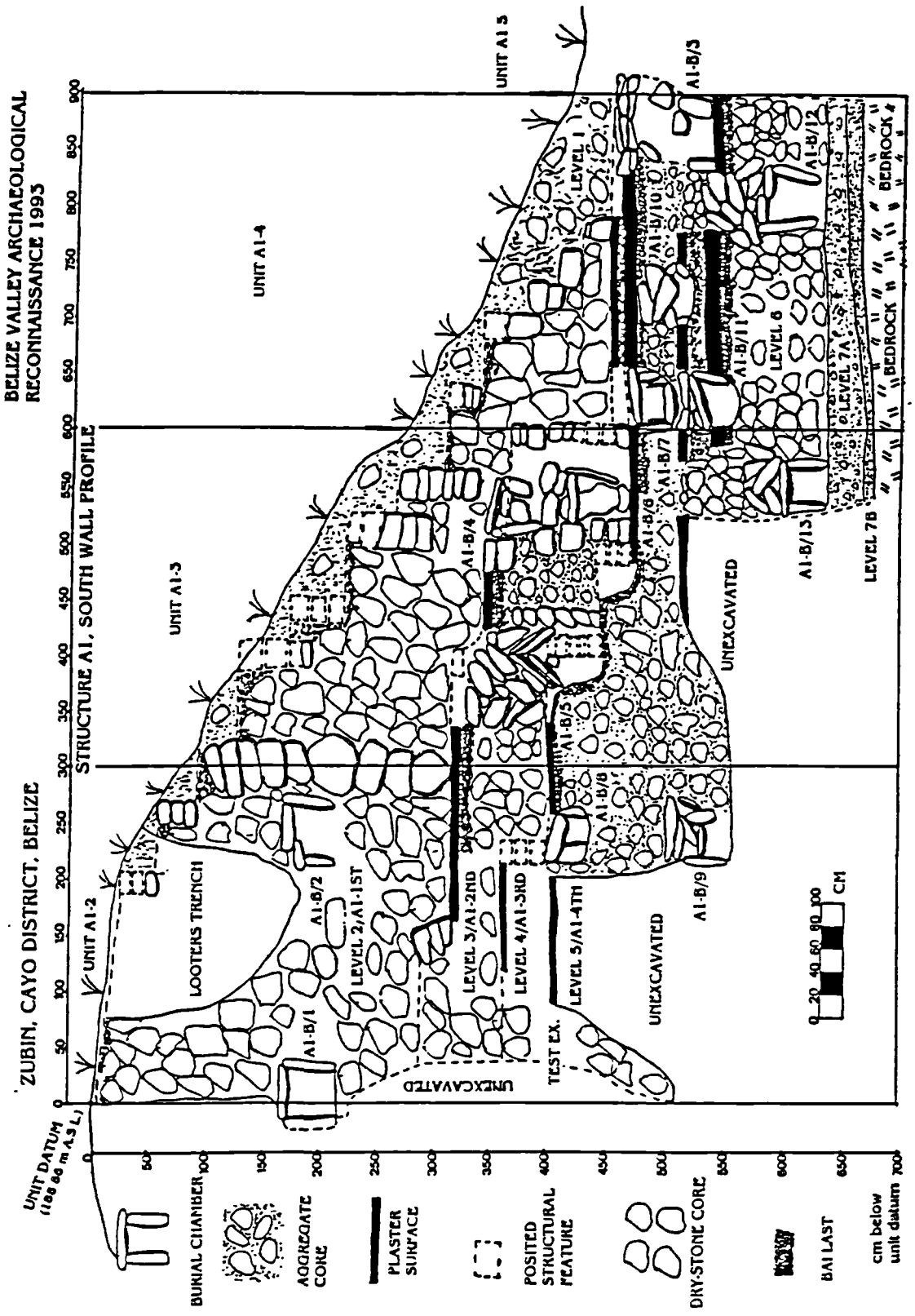


Figure 4.3. Post-excavation profile of Structure A1, looking south

representatives of the Savana and Joventud Ceramic Groups were found in moderate percentages. Further transitional types, related more closely to the Late Formative, early Xakal phase (350 B.C-100 A.D.), Sierra, Polvero, and Flor Ceramic Groups were also present in moderate to high numbers. This assemblage suggests that a transitional Middle Formative/Late Formative date of 650-350 B.C. is likely for the construction of this living surface.

Level 6. Level 6 represents the first major construction phase at the A1 locus. As with the two earlier deposits, this construction was only excavated in Unit A1-4 (see Figure 4.3). Level 6 consists of a ca. 97-100 cm thick plaza floor, representing a substantial construction effort. The highly compact plaza surface was exposed ca. 5.33 m below the trench datum. Floor preservation was good to excellent except for where it had been cut through by intrusive burials (Figure 4.4). A large rodent run had also been cut into this surface. The floor itself consisted of a ca. 10 cm plaster surface, underlain by ca. 5-10 cm of ballast (primarily pebble sized materials [0.4-6.4 cm]), and a ca. 80 cm dry-stone core deposit (mainly cobbles [6.4-25.6 cm]). The basal core materials had been set directly upon the earlier Level 7a sediments. Other than the floor itself, no further architectural features could be identified for this construction stage.

A figurine fragment (A1-SF/249), consisting of a partial torso and one leg, was recovered from the core materials during excavations (Figure 4.5). The presence of female genitalia permits the sexual identification of this figurine. A polished chert biface (A1-SF/269), chert scraper (A1-SF/270), macroblade stem (A1-SF/276), and a quartzite hammerstone (A1-SF/296) were also discovered . No other significant finds were encountered, except for numerous pieces of lithic debitage, ceramic sherds, and some faunal remains. Middle Formative, Kanluk phase (900-350 B.C.) sherds, representing the Savana, Joventud, Pital, Jocote, and Chunhinta Ceramic Groups were recovered in low to moderate percentages Late Formative, early Xakal phase sherds (350 B C.-100 A.D.), including transitional representatives of the Sierra, Flor, and Polvero Ceramic Groups were also present in moderate to high percentages. Taken together, these sherds suggest a date of 650-350 B.C. for the construction of this platform. It is evident that this much more elaborate construction stage either followed quickly on the heels of the slightly earlier 7a effort, or that the 7a deposit represents initial preparation for the Level 6 floor construction In the end no conclusive interpretation can be posited. The well preserved nature of the Level 6 floor surface indicates that it was either constantly kept

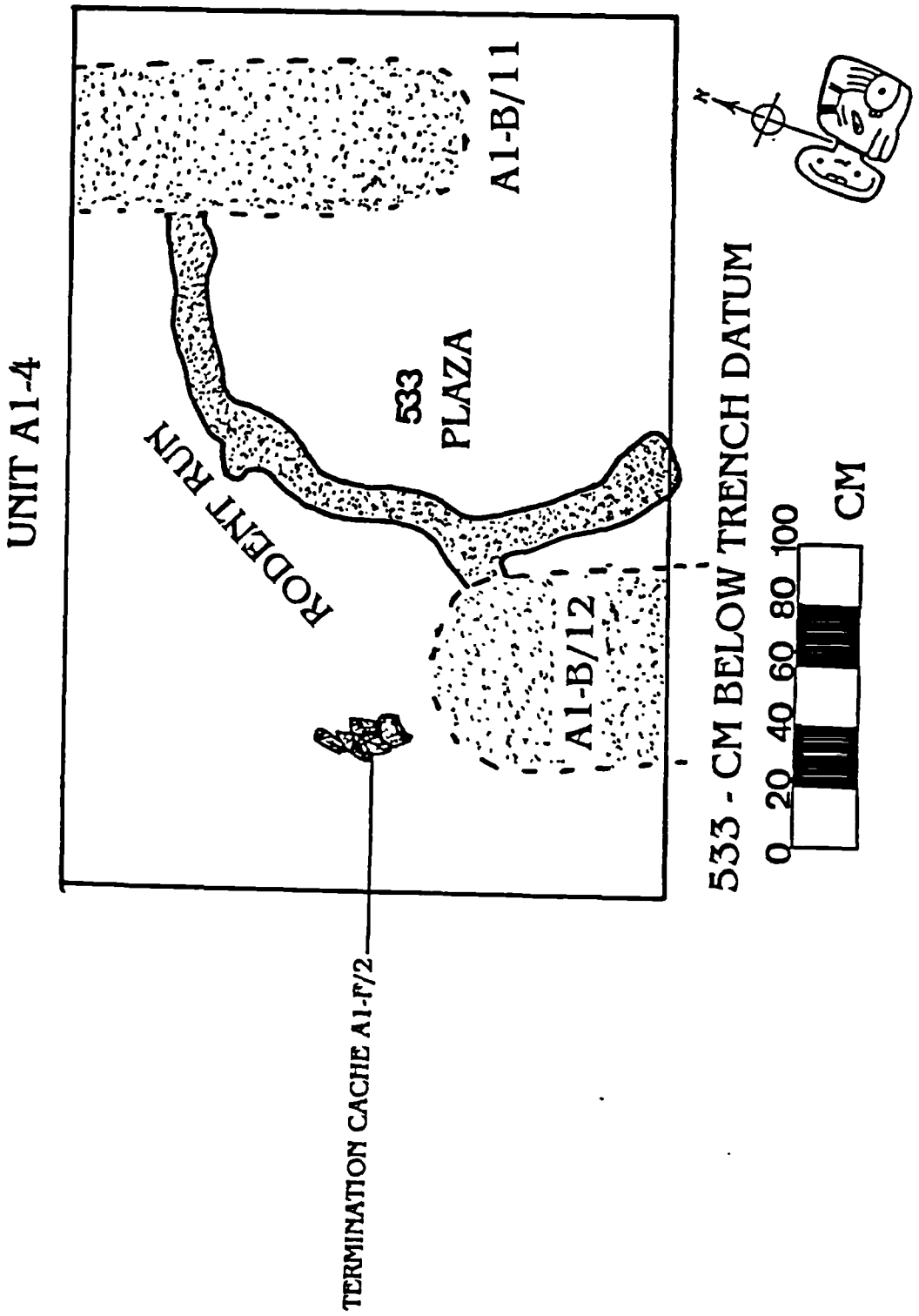


Figure 4 4. Top plan of Level 6 (Structure A1) showing intrusive burials and "rodent run".

Figure 4.5. Figurine fragment from Structure A1 (A1-SF/249,drawing by David Wheeler)

up, or utilised for a limited portion of time. Given that no evidence for refurbishing was evidenced, and that the next floor is postulated to have been laid sometime soon after the Level 6 construction, the latter seems the most likely explanation.

Level 5, A1-4th. Level 5, A1-4th excavations provided the first solid evidence for the presence of an actual structure, as a 1.00 m high platform section and associated courtyard floor were encountered (see Figure 4.3). Unfortunately, little remained of this construction level, as the placement of numerous intrusive burials almost obliterated not only the entire plaza floor, but also the majority of the platform itself (Figure 4.6). Poorly preserved remnants of the Level 5 courtyard floor were encountered at ca. 5.04 m below the trench datum in Unit A1-4, and in the extreme western sector of A1-3. The only other construction feature attributable to Level 5 was a small section of the platform itself (A1-4th), which was encountered at ca. 4 05 m below the trench datum in Unit A1-2. Due to the potential for wall collapse, we were unable to excavate this platform section Indications are, however, that it was employed as either an open activity area, or was surmounted by a pole-and-thatch superstructure. It was also considered of little use to excavate the minuscule courtyard floor remnant in Unit A1-3. In the end we had to be satisfied with excavating the poorly preserved courtyard floor in Unit A1-4. The floor, which was ca. 24 cm thick, consisted of a ca. 10 cm plaster surface, capping a ca. 14 cm thick ballast layer (primarily pebble sized clasts [0.4-6.4 cm]), which had been laid down as a wet mass (small aggregate).

With the exception of a quartzite hammerstone (A1-SF/293), no artefacts of note were recovered from this level. Lithic debitage, ceramic sherds, and faunal remains were encountered in moderate to high percentages. Ceramics from this level were again a mixture of Middle Formative, Kanluk phase (900-350 B.C.) and Late Formative, Xakal phase (350 B.C.-350 A.D.) materials. Sherds from the Savana, Joventud, and Pital Ceramic Groups represented the Kanluk Ceramic Complex, whereas the Xakal Ceramic Complex was represented by members of the Sierra, Hillbank, Polvero, Sapote and Flor Ceramic Groups. Some apparently transitional types were again present in this assemblage, and a date of 350 B C.-100 A D. seems likely for the construction of Structure A1-4th and its associated platform. Subsequent to the construction of A1-4th, no further Late Preclassic structural elaborations occurred at the A1 locus. Due to the poor preservation of the courtyard floor, it is clear that long term use of this surface did

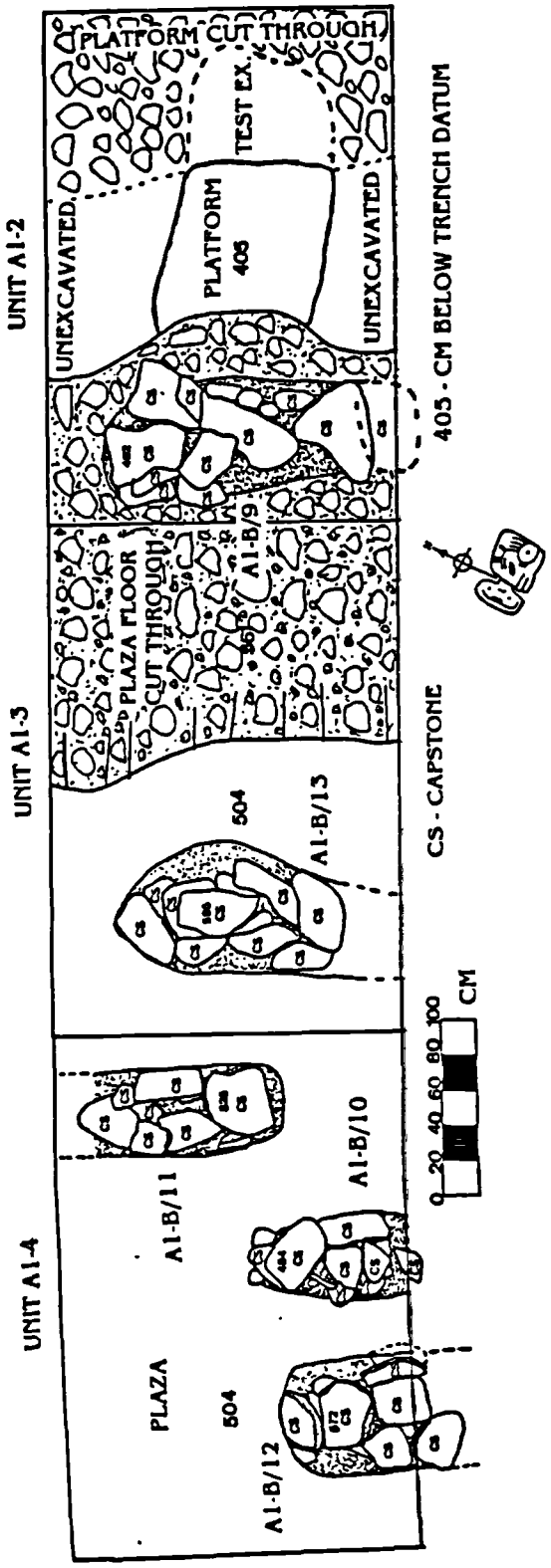


Figure 4.6. Top plan of Level 5, A1-4th, showing intrusive burials.

take place. One feature, *Cache A1-F 2*, was recovered during excavation of Level 5, A1-4th (see Chapter 5).

Level 4, A1-3rd. Level 4, A1-3rd signifies the next major construction effort at the A1 locus. At this time a new structure, A1-3rd, and an associated courtyard surface were constructed (see Figure 4.3). Remains of this architecture were exposed and excavated in units A1-2, A1-3, and A1-4 (Figure 4.7). As with the preceding A1-4th structure, the placing of intrusive burials and the recycling of some architectural components during subsequent constructions had destroyed large sections of the A1-3rd structure and courtyard floor. Within the extreme western section of Unit A1-3, and throughout Unit A1-4, the A1-3rd courtyard floor was encountered at ca. 4 61 m below the trench datum. This floor was 46 cm thick in total, and preservation was good to excellent. The floor consisted of a ca. 8-17 cm thick plaster surface, underlain by a thin ca. 5 cm ballast layer, and a ca. 32 cm core deposit, the latter made up primarily of aggregate core (mainly cobble [6.4-2.5 cm] and pebble [0.4-6.4 cm] sized clasts), interspersed with lime mortar and lenses of dark brown sediments. There is evidence for at least three refloorings of the plaster surface. Moving to the east, sections of the actual A1-3rd structure were encountered. The platform of this structure was exposed in unit A1-2 at ca. 3.61 m below the trench datum. It had been cut through on the east by an intrusive feature, and on the west by a burial (A1-B/8, see Chapter 5). The platform itself had been raised ca. 46 cm above the previous A1-4th platform, and its thickness and construction elements corresponded almost exactly with those already outlined for the associated plaza floor. No evidence for a masonry superstructure could be found, implying that A1-3rd was either surmounted by a pole-and-thatch building, or more likely existed as an unadorned platform.

Between the platform and the courtyard floor a section of terrace was encountered near the juncture of Units A1-2 and A1-3, at approximately 4 01 m below trench datum. To the east this terrace seemingly intersected with the toe of a 40 cm riser, although placement of intrusive burial A1-B/8 (see Chapter 5) had subsequently destroyed this feature. To the west the terrace verge probably met a ca. 50 cm high riser From this point a tread, ca. 80 cm in depth, and a subsequent ca 30 cm high riser would have led down to the courtyard surface. These latter two features are only suggested based on the presence of other features, as they were dismantled during the ensuing construction phase (see below). What does remain is an undulating backing

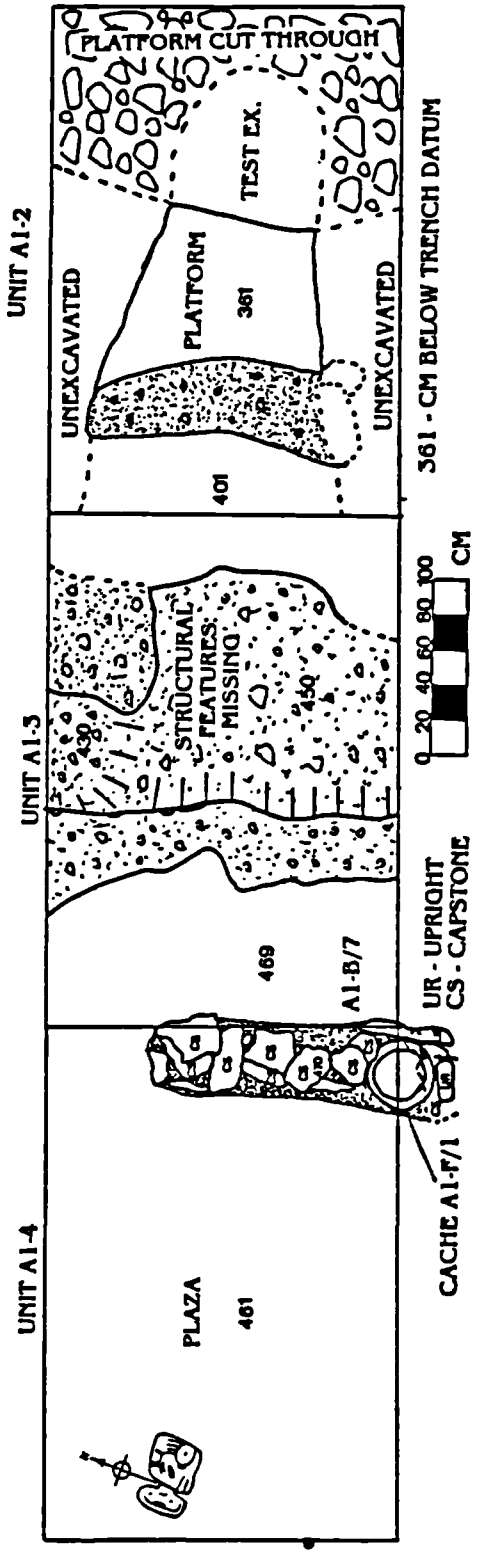


Figure 4.7. Top plan of Level 4, A1-3rd, showing intrusive burials.

masonry surface (small aggregate) suggestive of the presence of the two postulated risers Taken together, these architectural remains indicate that A1-3rd was a ca. 1.00 high structure, its platform having been accessed via three stair risers.

Lithic debitage, ceramic sherds, and faunal remains were recovered in moderate to high numbers throughout the Level 4, A1-3rd excavations. A biface fragment (A1-SF/272), an exhausted biface fragment (A1-SF/278), a limestone awl (A1-SF/300), and a limestone "rectangulate" (A1-SF/283) were also discovered All other artefacts of note were obtained from burial excavations (see Chapter 5). Unfortunately, the ceramic sample retrieved from this level was of an extremely mixed nature. This was due in part to the long occupation, and subsequent continual reflooring of the surface. Contamination is also partially attributable to the number of intrusive burials placed not only throughout the occupation of Structure A1-3rd and its associated courtyard, but also during subsequent construction phases. Luckily, the initial construction of Structure A1-3rd can be provided with a fairly accurate temporal determination given the ceramic assemblage provided by Burial A1-B/9 (see Chapter 5). The vessels from this interment suggest a transitional Late Formative, Xakal phase date of 100-350 A.D. for initial construction of this structure. The remaining ceramics recovered from this level point towards continuous occupation and refurbishing of this structure and its associated courtyard surface through the remainder of the Early Classic, Ahcabnal phase (350-600 A.D.) and Late Classic, Xnipek phase (600-675 A.D.). Five burials, *A1-B 9, A1-B 10, A1-B 11, A1-B 12,* and *A1-B 13*, recovered from excavations into the A1-3rd structure and associated courtyard floor, are attributable to this long time period (see Chapter 5).

Level 3, A1-2nd. Level 3, A1-2nd represented the construction of a new, larger structure at the A1 locus (see Figure 4.3). This structure, A1-2nd, constitutes the penultimate A1 architecture. A1-2nd and its associated courtyard floor were excavated within Units A1-2, A1-3, and A1-4. Preservation of the structural components was good to excellent, although the placement of intrusive burials had unfortunately destroyed many sections of the platform, stairs, and courtyard surface (Figure 4.8). The platform itself had been completely removed by a large intrusive cut attributable to the terminal construction. Thus, whether the platform was originally surmounted by a superstructure or not cannot be determined, although indications are that if a superstructure had existed it was only of pole-and-thatch. All that remained to suggest the former height of the platform was the upper riser section This step consisted of a

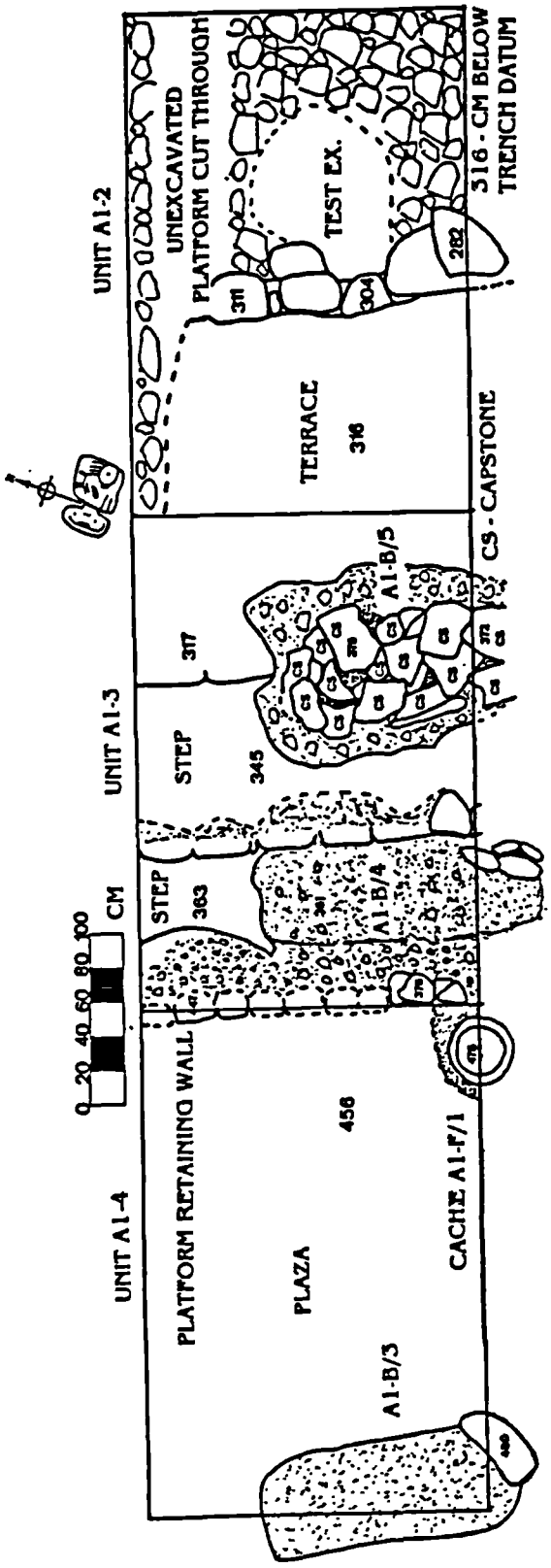


Figure 4.8 Top plan of Level 3, A1-2nd, showing intrusive burials.

three course, ca. 30 cm high riser. The nose of the step was encountered in Unit A1-2 at ca. 2.85 m below the trench datum. Sections of plaster still adhered to the facing stones. Moving to the west, the toe of this riser intersected with a terrace The top of this terrace was encountered at ca. 3.15 m below trench datum. This feature ran approximately 2.40 to the west, where a lower step was encountered at ca. 3.45 m below trench datum. The terrace verge to foot height was ca. 30 cm The tread of the new step ran ca. 94 cm to the west, where one final step was encountered at ca. 3.63 m below trench datum. This last step ran ca. 1.00 m to the west, where it terminated at the juncture with a poorly preserved, nine course platform facing wall (ca. 93 cm in height). The previous A1-3rd courtyard floor provided the sustaining surface for this feature. This courtyard was ca. 4.56 m below the trench datum. The courtyard surface had been resurfaced at least once, and where it ran into the base of the platform facing wall a plaster turn-up was recognised. The placement of this facing wall indicates that the series of steps and terraces leading to the A1-2nd platform were probably reached via two stairs adjacent to, but not directly on the primary axis. This platform would have risen ca. 1.70 m above the courtyard floor.

With reference to A1-2nd construction methods, excavations indicated that the plaster surface covering the platform, terrace, and steps was ca. 8-10 cm thick, and was underlain by ca. 10-20 cm ballast layer (primarily pebble sized clasts [0.4-6.4 cm]), and a dry-stone core layer of variable thickness (mainly cobble [6.4-25.6 cm] and pebble [0.4-6.4] sized clasts). Excavations within the platform exposed a thin lense of wood charcoal, situated between the ballast and the plaster. This was collected for C14 dating. The terrace verge was formed by a large cut-stone, the terrace foot by a ca. 20 cm thick deposit of small aggregate. Within Unit A1-3 a ca. 90 cm thick fill retaining wall had been constructed in order to resist the lateral pressure of the A1-2nd platform fill. This retaining wall would have been a necessity given that the platform facing wall would not have been able to withstand this pressure on its own. During the construction of this feature the facing stones from the earlier Stucture A1-3rd stair had been extracted and employed. These were utilised to form a block facing on the west of the retaining wall. This construct was seven courses and ca. 1.25 m high. The eastern portion of the wall consisted of a rubble facing (primarily cobble sized clasts [6 4-25.6 cm]). Finally, the wall body was made up of a thick mass of aggregate core The A1-2nd plaza floor was little more than a resurfacing of the earlier A1-3rd courtyard surface. A ca 2-3 cm

ballast layer (mainly pebble sized clasts [0 6-6 4 cm]) had been deposited first, followed by a ca. 8-10 cm plaster layer. This surface was very well preserved in most areas.

Numerous lithics, faunal, and ceramic remains were recovered from Level 3, Structure A1-2nd. A conch shell (Strombus) adorno (A1-SF/39, see Figure 4.9b), and a granite metate fragment (A1-SF/267) were recovered from the construction fill in Unit A1-3. All other significant artifactual materials were recovered from the two burials associated with this level (see Chapter 5). The sherd sample recovered during excavations was dominated by representatives of the Late Classic, Maxik phase (675-875 A.D.), including members of the Belize, Dolphin Head, and Chunhuitz Ceramic groups. However, also present in considerable numbers were members of the earlier Xnipek phase (600-675 A.D.), Sotero, Macal, and Mountain Pine Ceramic Groups. Seeing as at Barton Ramie Gifford (1976) considered the Sotero Ceramic Group to be transitional, and the Dolphin Head Ceramic Group to belong to the early facet Spanish Lookout phase, a date of 675-750 A.D. for the construction of Structure A1-2nd seems warranted. This date is reaffirmed by the grave assemblages associated with the construction of this architecture (Burials *A1-B 6*, *A1-B/7*, A1-B/8; see Chapter 5).

Level 2, A1-1st. Level 2, A1-1st, representing the terminal occupation of the A1 locus, consisted of Structure A1-1st and its associated courtyard floor (see Figure 4.3). The construction of A1-1st easily doubled the height of the earlier A1-2nd platform. That A1-1st represents a slight change in architectural type is also clearly evident, A1-1st being a true steep sided pyramidal structure, as opposed to the lower platforms which preceded it. A1-1st was excavated in Units A1-2, A1-3, A1-4, and in the extreme eastern portion of Unit A1-5 (Figure 4.10). In general, the A1-1st architecture was poorly preserved, due to the long period of exposure to weathering and erosion. In addition, the steep-sided nature of the structure promoted the effects of gravitational processes. Finally, past cattle grazing and pasture clearing had led to the partial or full denudation of vegetation, a factor which would have accelerated the effects of erosion and weathering. However, the architectural remains that did exist allowed a fairly accurate description of the architecture.

The terminal A1 platform surface, encountered in Unit A1-2 at ca 1-2 cm below the trench datum, was represented by a ca. 5 cm thick ballast layer containing mainly pebble sized materials (0 4-6.4 cm in size). The underlying deposit, consisting of a ca 2.90 m thick dry-stone core deposit, was made up of very loosely consolidated cobble

Figure 4 9. Shell artefacts from Structure A1: (a) spondylus shell bead (A1-SF/52); (b) conch shell adorno (A1-SF/39; drawings by Peter McDonagh and Lucinda Blatch).

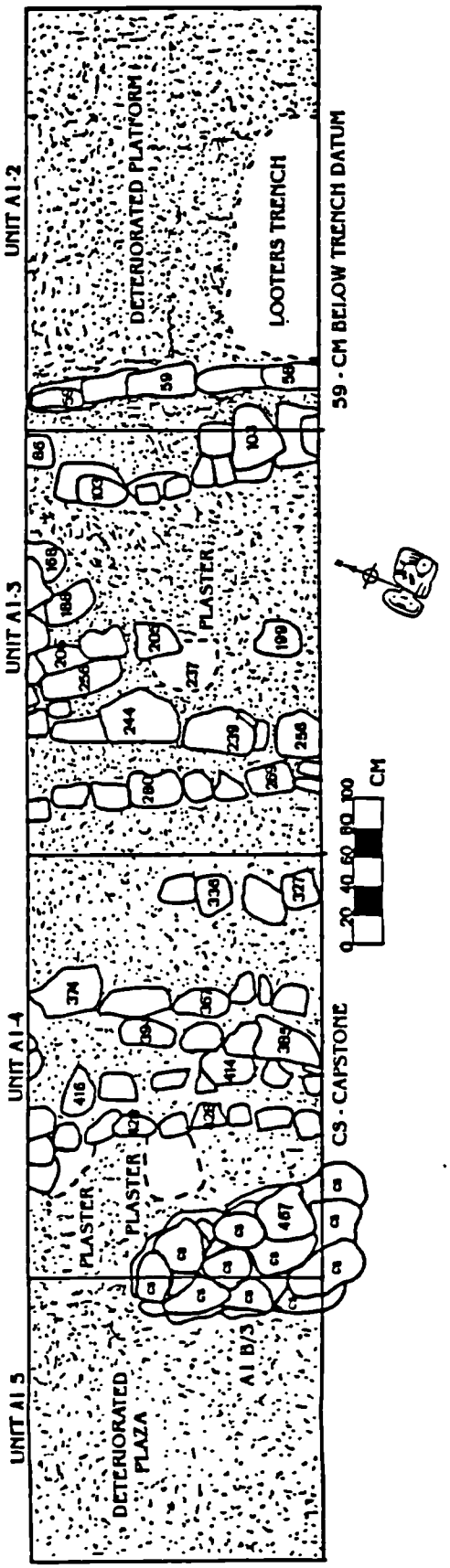


Figure 4.10. Top plan of Level 2, A1-1st, showing intrusive burials.

(6.4-25 6 cm) and boulder sized (> 25 6 cm) limestone rubble A sizeable looters trench had destroyed a large portion of the platform, as well as sections of the upper stair riser. No evidence for a superstructure was discovered during excavations, and if A1-1st was surmounted by a smaller building it must have been a pole-and-thatch construct To the west the platform abutted the nose of a three course, ca. 35 cm high stair riser. The toe of this riser intersected with a ca 60 cm deep tread. Although variations did exist, this formula of riser height and tread depth was generally repeated through Units A1-3 and A1-4. In total, the stair appears to have originally consisted of at least eleven steps. Sections of balustrade were recognised along the northern border of the trench. Given the exposed section of stairs, and the overall shape of the A1 mound, it is likely that these remains represent an inset stair. Excavation through the stair face exposed a ca. 30 cm layer of backing masonry, mainly pebble [0.4-6.4 cm] and cobble [6.4-25.6 cm] sized clasts interspersed within a mortar matrix , and a dry-stone core deposit of variable thickness (mainly cobble [6.4-25.6 cm] and boulder [>25.6] sized clasts) At the boundary of Units A1-2 and A1-3, a large fill retaining wall was encountered. This was required to withstand the lateral pressure of the loose dry-stone core deposit beneath the A1-1st platform. The A1-2nd terrace tread formed the sustaining surface for this wall. Further down the stair, near the western boundary of Unit A1-3, two further fill retaining walls were exposed. These were of minimal size, and in reality constituted the basal courses of two stair risers which intruded into the backing masonry. However, they would still have sufficed to retain the fill between them and the larger wall to the east. It is of interest that the massive A1-1st construction effort did not correspond with a raising of the courtyard surface. Rather, the earlier A1-2nd plaza floor continued to be used, except for where it was covered over by A1-1st construction, in which case it acted as the sustaining surface (ca. 4.56 m below trench datum).

Ceramic sherds and lithic debitage were abundant in Level 2, A1-1st, and freshwater shells were also present. An unperforated potsherd disk (A1-SF/7), a granite metate fragment (A1-SF/284), an andesite celt or mano fragment (A1-SF/285, Figure 4.11a), a basalt metate fragment (A1-SF/286, Figure 4.11b), a chert biface fragment (A1-SF/287), and a limestone triangulate (A1-SF/288) were obtained from within the boundaries of Unit A1-2. A thin, chert biface (A1-SF/275), a chert hammerstone (A1-SF/281), a granite mano fragment (A1-SF/282, Figure 4.12a), a chert biface fragment (A1-SF/292), and a chert biface preform, discard (A1-SF/291) were recovered

Figure 4.11. Groundstone artefacts from A1-1st: (a) andesite celt or mano fragment (A1-SF/285); (b) basalt metate fragment (A1-SF/286, drawings by Tina Christensen and Gyles Iannone).

Figure 4 12. Groundstone mano fragments from A1-1st: (a) granite mano fragment (A1-SF/282); (b) andesite mano fragment (A1-SF/294; drawings by Tina Christensen and Gyles Iannone).

from Unit A1-3. A granite metate fragment (A1-SF/297) and a chert biface fragment (A1-SF/298) were discovered in unit A1-4. A possible axially aligned cache, containing three whole obsidian blades (A1-SF/3, 4, 5) and one medial section (A1-SF/6) was also exposed in Unit A1-2. All other significant finds were recovered from caches and burials (see Chapter 5). Due to poor preservation of the A1-1st architecture, it is inevitable that some mixing of the ceramic assemblage has occurred. Analysis indicated that varieties representing the Xnipek phase (600-675 A.D.) Sotero Ceramic Group, and the Maxik phase (675-875 A.D.) Dolphin Head, Belize, Mount Maloney, and Chunhuitz Ceramic Groups were dominant. Seeing as at Barton Ramie Gifford (1976) saw the Sotero Group to be transitional, and the Dolphin Head Group to be an early facet member of the Spanish Lookout Ceramic Complex, a date of ca. 675-750 A.D. is likely for the construction of Structure A1-1st. This date is reaffirmed by the ceramic assemblages retrieved from the excavation of burials and caches associated with this structure. Five burials (*A1-B 1, A1-B 2, A1-B 3, A1-B 4, A1-B 5*), and one cache (*A1-F 1*) were encountered during excavations within Level 2, A1-1st (see Chapter 5).

Level 1. Level 1 was a surface deposit of variable thickness (1-70 cm), consisting of humus and fall materials (see Figure 4.3). Naturally, due to the steepness of the mound, this deposit was thicker near the base of the structure. Erosional activity was undoubtedly promoted by the fact that the site was cleared for cattle grazing up until three years before our arrival. The partial or full denudation of vegetation from the surface of the mound would have accelerated erosional processes, thus much of the original surface cover may have been washed downwards towards the base of the mound in the form of colluvial and gravitational sediments. Ceramics from this level represent the entire Maxik phase occupation (ca. 675-875 A.D). Lithic debitage and ceramic sherds were recovered in moderate quantities. Numerous, large Maxik phase (675-875 A.D.) sherds were recovered in abundance directly in front of the basal step, suggesting that their deposition was part of a termination ritual of some sort. Unfortunately, the depositional integrity of this assemblage remains questionable, as earlier ceramics may have been deposited in this vicinity due to the movement of materials derived from the deterioration of the A1 terminal architecture. Thus this cluster of sherds cannot provide an accurate date for the termination of A1 occupation.

Significant finds included a limestone bead (A1-SF/29) recovered from Unit A1-2, a figurine head (A1-SF/31), a granite metate fragment (A1-SF/279), a thin, chert

biface fragment (A1-SF/280), and the medial section of an obsidian blade (A1-SF/30) from Unit A1-3, a chert biface fragment (A1-SF/273), a limestone leg? (A1-SF/277), a drilled sherd (A1-SF/250), the proximal section of an obsidian blade (A1-SF/34), and a drilled/carved sherd (A1-SF/250) from Unit A1-4, and the distal section of an obsidian blade (A1-SF/33), a granite mano (A1-SF/268, Figure 4.13), and a perforated sherd (A1-SF/32) from Unit A1-5.

In summary, excavations in Structure A1 produced a complicated picture of construction events and ritual deposits That Structure A1 provides a quintessential example of an eastern ancestor shrine cannot be questioned. From the earliest recognised building platform construction (Level 5/A1-4th), through to its abandonment, Structure A1 was a perpetual focus of rituals, interments, and sacrifices. This activity was undoubtedly related to the institution of ancestor veneration.

Ac Courtyard Operation: Unit A1-1

Two "plaza" units were excavated within the *Ac* Courtyard. The first unit, Unit A1-1, a 2 x 2m unit, was located slightly off centre at the base of Structure A1 (see Figure 4.2). This excavation was initiated in order to gather information concerning the architectural make-up of Structure A1 and its associated courtyard surface, as well as artifactual data regarding the temporal sequence of structure and courtyard construction. Excavations produced the following information (see Figure 4.14).

Level 6, Floor IV. Level 6, Floor IV, the initial living surface encountered in Unit A1-1, was capped by ca. 28 cm of hard-packed clay-rich sediments, containing moderate percentages of pebble sized materials (0.4-6.4 cm). Underlying this surface deposit was a thin ballast layer (ca. 4-5 cm) composed mainly of pebble sized clasts (0.4-6.4 cm), and a thick bed of loose core (ca. 60-65 cm) containing high percentages of both cobble (6.4-25.6 cm) and boulder sized clasts (> 25.6 cm). Beneath this core layer a ca. 28 cm thick deposit of loose, dark sediments occurred, possibly representing a paleosol. Artefacts were present in this deposit, indicating that it is not sterile. The dark sediments were underlain by hard, sterile limestone bedrock, which was encountered at ca. 335-340 cm Below unit Datum.

Figure 4.13. Granite mano (A1-SF/268) from Structure A1 (drawing by Tina Christensen and Gyles Iannone)

A medial section from an obsidian blade (A1-SF/18) was recovered from this floor level. Ceramic sherds, freshwater shells, and lithic debitage were also present. All sherds recovered from this level were types of the late facet Kanluk phase (650-350 B C.). The dominant types included members of the Joventud, Savana, Chunhinta, and Jocote Ceramic Groups. These types indicate that a ceramic date of 650-350 B C. for the construction of this raised platform is likely.

Level 5, Floor III. Level 5, Floor III, the next raised platform surface constructed, was a plaster floor ca. 24 cm thick in total (see Figure 4.14). The fairly rough but consistent plaster surface, ca 6 cm thick, was made up mainly of a mixture of plaster and pebble sized materials (0.4-6.4 cm), with the addition of a few cobble sized clasts (6.4-25.6 cm). Preservation was better along the east and south walls of the unit. The upper ca. 3.5 cm of the plaster surface consisted of a series of thin re-floorings. Underlying the plaster cap was a ca. 17 cm bed of ballast, mostly pebble sized materials (0 4-6.4 cm).

Ceramic sherds and lithic debitage were abundant in this level. Freshwater shells were also recovered, as was the medial section of an obsidian blade (A1-SF/15), and a chert biface preform discard (A1-SF/295). The majority of sherds recovered from Level 5 represented the early facet Xakal phase (350 B.C.-100 A.D.). These were predominantly members of the Sierra and Polvero Ceramic Groups. Also present in moderate numbers were varieties of the Savana and Jocote Ceramic Groups, members of the Middle Formative Kanluk Ceramic Complex. This ceramic collection indicates that Floor III was constructed sometime around 350 B.C.-100 A.D.

Level 4, Floor II. Level 4, Floor II represents a new platform construction, which varied in thickness from 35-50 cm (see Figure 4.14). Floor II consisted of a ca. 5 cm thick plaster layer containing some pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts. Preservation of this surface ranges from very well preserved in the southeast corner to moderately well preserved throughout the rest of the unit. The plaster surface overlay a ca. 8 cm layer of fine ballast, made up mainly of pebble sized materials (0.4-6.4 cm), and a ca. 32 cm bed of core, largely cobble (6.4-25.6 cm) and boulder sized (> 25.6 cm) clasts.

A chert biface fragment (A1-SF/290), a quartz massive metate fragment (A1-SF/289), and a few bivalve shells were recovered from this level Lithic debitage was presented in large quantities, as were ceramic sherds. The latter were particularly

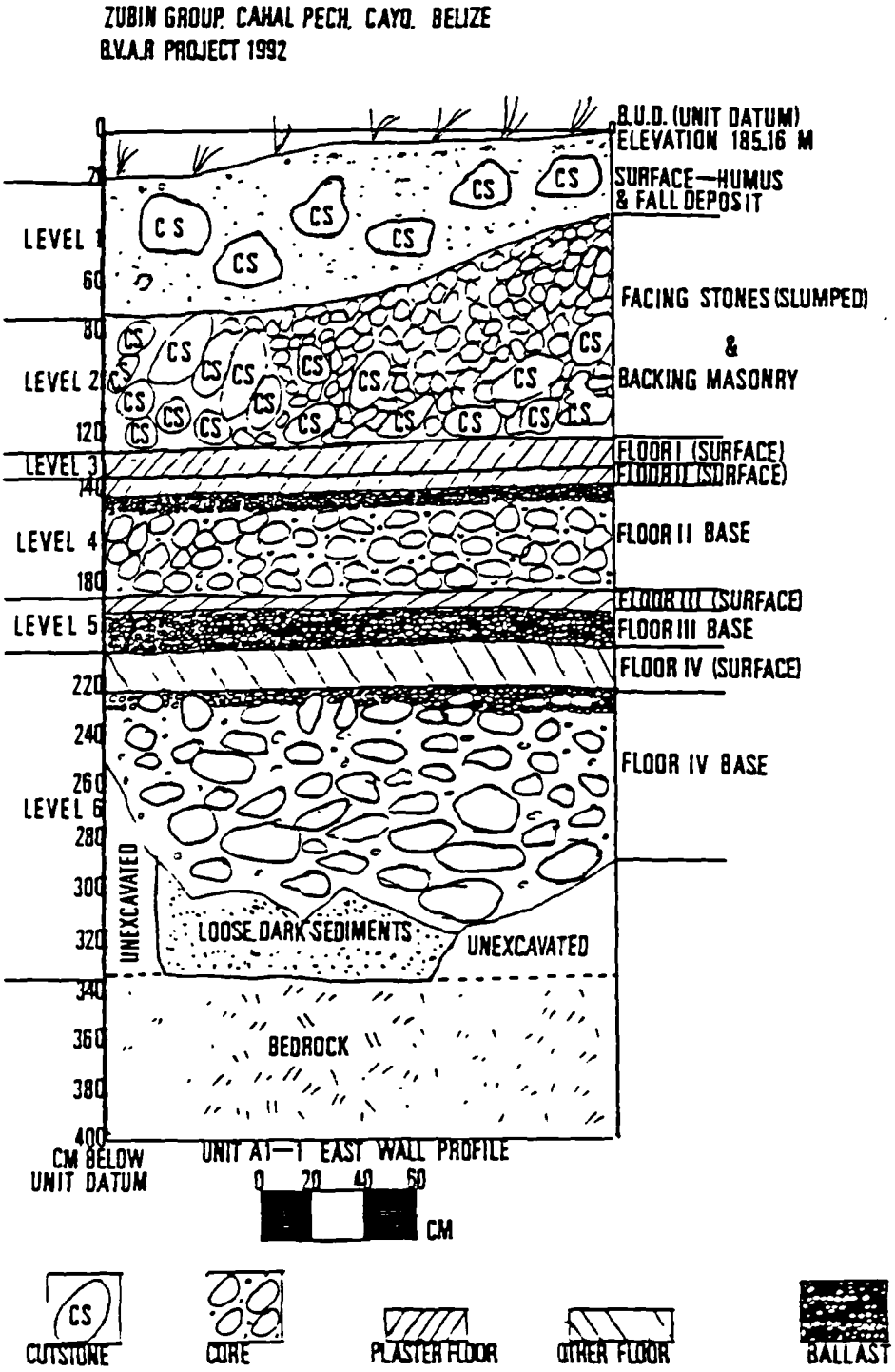


Figure 4 14. Post-excavation profile of Unit A1-1, facing east.

abundant in the northwest corner of the unit. The majority of Level 4 sherds belonged to the late facet Xakal phase (100-350 A.D) Sierra, Flor, Polvero and Hillbank Ceramic Groups This assemblage implies a construction date of 100-350 A.D. for this courtyard surface.

Level 3, Floor I. Level 3, Floor I, a poorly preserved courtyard surface, comprised the sustaining surface for penultimate and terminal A1 architecture (see Figure 4.14). This surface, approximately 6.5-11.5 cm thick, consisted mainly of plaster with the addition of a few pebble (0.4-6.4cm) and cobble (6.4-25.6 cm) sized clasts. Preservation was poor across the unit except in the southeast corner. No ballast or core materials had been used to form a base for this floor surface. Floor I was not easily separable from the Floor II surface which underlay it. This unfortunately caused some mixing of the two ceramic samples.

Lithic debitage and ceramic sherds were abundant. One drilled sherd was also recovered (A1-SF/21). Sherds from this level were primarily from the early Maxik phase (675-750 A.D.), mainly representatives of the Belize and Dolphin Head Ceramic Groups. Sherds of the Xnipek phase (600-675 A.D.) Sotero Red-Brown Ceramic Group were also present in sizeable numbers. Seeing as the latter group overlaps the Xnipek/Maxik boundary, and that the Dolphin Head sherds represent the early Maxik phase, a date of roughly 675-750 A.D. for the construction of this floor is suggested.

Level 2. Level 2, varying from 0.5-86.5 cm in thickness, was made up of poorly preserved terminal architecture (see Figure 4.14). A few cobble (6.4-25.6 cm) and boulder sized (> 25.6 cm) facing stones remained roughly in position, although many had slumped downwards towards the courtyard surface. A large section of smaller cobble sized materials (6.4-25.6 cm), representing backing masonry, were exposed in areas where the facing stones had slumped away.

One broken, andesite mano (A1-SF/294, Figure 4.12b) was found in Level 2. Lithic debitage and ceramic sherds were abundant. Early Maxik Ceramic Complex (675-750 A.D.) sherds predominated, mainly those of the Cayo, Belize, Dolphin Head, and Mount Maloney Ceramic Groups. Given the presence of numerous Dolphin Head Red sherds, an early Maxik type, a date of ca. 675-750 A D. for the construction of the terminal A1 architecture seems likely. The presence of the Mount Maloney sherds (a late Maxik type) may represent terminal Maxik occupation and/or structural refurbishing (dating to ca. 750-875 A.D.), following Willey et al.'s (1965:373, 377) and Gifford's

(1976:226-227) view that this type "must have been a local manifestation of San Jose V" ceramics

Level 1. Level 1 was 35-55 cm thick, and consisted of humus and fall materials (see Figure 4.14). Sedimentary clast size varied from pebble (0.4-6.4 cm) to boulder size (> 25.6 cm). Compaction was loose to moderate, and roots and rootlets were prevalent in the upper portions of the deposit. Having been formed by natural processes, including erosion, weathering, and the collapse of terminal architecture, with the addition of materials produced by looters, Level 1 was an extremely mixed deposit

Two obsidian blade sections, one proximal (A1-SF/1) and the other medial (A1-SF/2), were retrieved from this level. A quartzite hammerstone was also recovered. Lithic debitage, freshwater shells, and ceramic sherds were moderately abundant. The majority of sherds belonged to the Maxik Ceramic Complex (675-875 A.D.), mainly representatives of the Cayo, Belize, and Dolphin Head Ceramic Groups. A sizeable number of Xnipek Complex sherds (675-750 A.D.), largely examples of the Sotero and Zibal Ceramic Groups, were also present. Given that the temporal distribution of Sotero Red-Brown overlaps the Xnipek and early Maxik phases (Gifford 1976:192, 226; Willey et al. 1965:360, 362), and that Dolphin Head Red is considered an early Maxik phase member (Gifford 1976:226), it is tempting to date the Level 1 deposit to the 675-750 A.D. time range. However, as a result of the disturbed nature of the deposit, only a gross post-675 A.D. date can be provided.

Ac Courtyard Operation: Unit AP-1 AP-1a

The second "plaza" unit, Unit AP-1 (AP-1a), was placed at the boundary of the *Ac* and *Bac-ha* Courtyards during the 1992 season (see Figures 4 2 and 4.15). It was hoped that this unit would enable us to establish whether this area constituted an access point between the two courtyards, or whether in fact a hidden mound was situated at this location. The unit was also deemed appropriate for the investigation of construction near the boundary of the two courtyards. Originally laid out as a 2x2 m unit (AP-1), it was subsequently down-sized to 1x1 m (AP-1a) upon confirmation that no hidden structure was located at this point. This smaller unit stressed the acquisition of data reflective of the temporal growth of the courtyard at this locale, and the methods of construction employed.

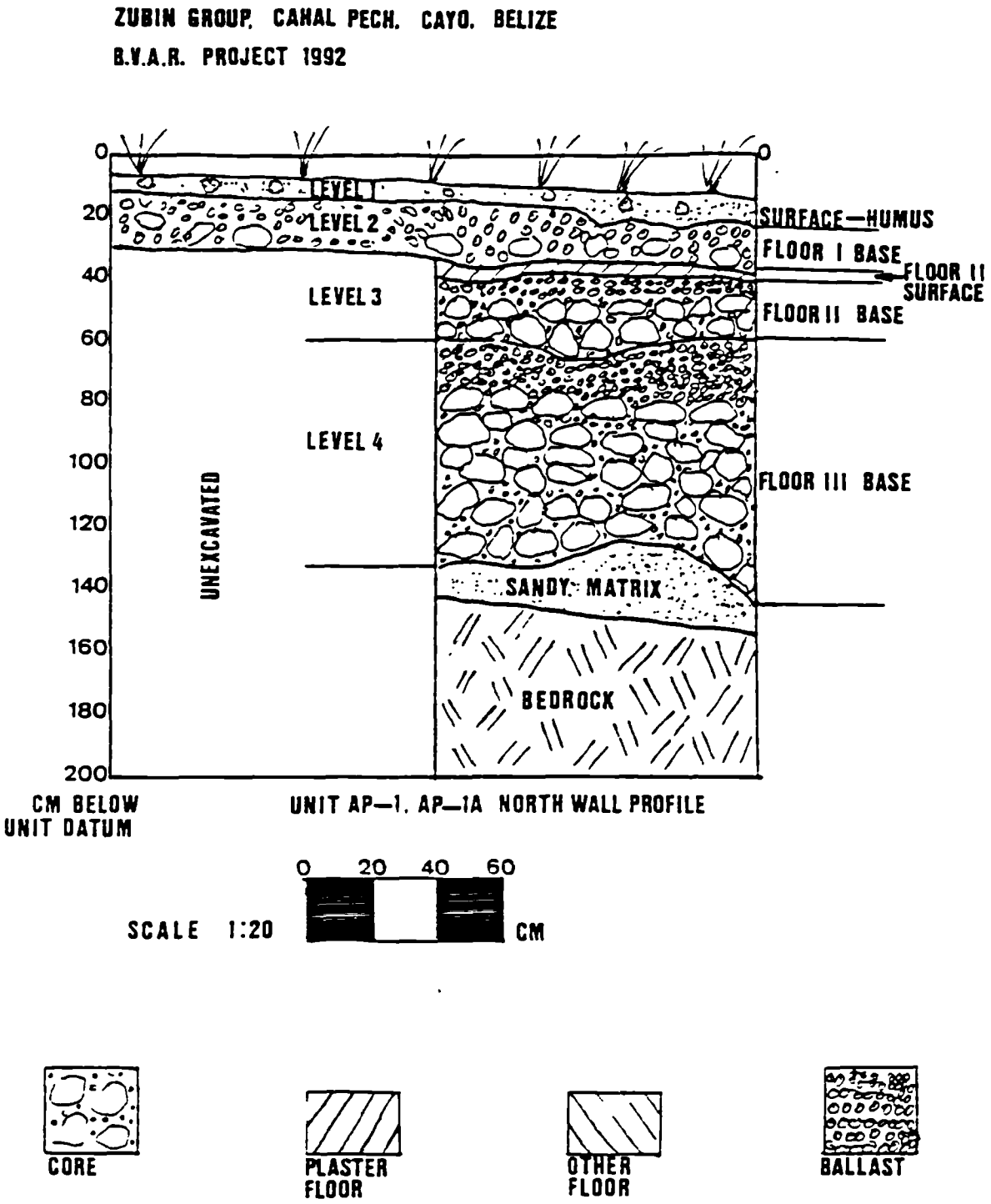


Figure 4.15. Post-excavation profile of Unit AP-1 (AP-1a), facing north.

Level 4. Level 4, was excavated within Unit AP-1a, a 1x1 m sub-unit in the northeast corner of the larger AP-1 unit (see Figure 4.15). This initial cultural level consisted of a ca 70-80 cm floor deposit (Floor III), underlain by a ca 10-20 cm layer of finer sediments. The Floor III surface was almost completely decomposed, no plaster being present. The upper portion of the presumed floor was composed of a 10-20 cm ballast layer. This lay over a 50-60 cm core deposit. These subfloor deposits were loosely consolidated The ballast was made up mainly of pebble sized (0.4-6.4 cm) clasts, whereas the core layer was predominately cobble sized (6.4-25.6 cm) materials. Mixed within these deposits were fine, light coloured sediments. The finer sediments underlying the core deposit possibly represent a paleosol. At ca. 145-155 cm Below Unit Datum hard limestone bedrock was reached.

Ceramic sherds, lithic debitage, and freshwater shells were present in large quantities, particularly in the upper levels of the deposit. The distal section of an obsidian blade (AP-SF/2), a snapped obsidian blade (AP-SF/3), a figurine leg (AP-SF/4), and a figurine hand (AP-SF/5) were also found within the Floor III deposit. The ceramic sample contained transitional early facet Xakal phase (350 B.C.-100 A.D.) types, mainly from the Sierra and Polvero Ceramic Groups, and moderate numbers from the Paila Ceramic Group. Late facet Kanluk phase types (650-350 B.C.) were also represented. Taking into account the potential for some mixing resulting from poor surface preservation, and the date assigned to this level through the larger, more pristine sample produced during A1 operations, a date of roughly 650-350 B.C. is suggested for the construction of this living surface.

Level 3. Level 3 was also excavated in the down-sized AP-1a unit (see Figure 4.15). Level 3, a ca 32 cm floor Level (Floor II), was capped by a ca. 2.5 cm thick poor to moderately preserved plaster surface Underlying this plaster deposit was a ca. 10 cm ballast level, comprised mainly of pebble sized (0 4-6.4 cm) clasts. Beneath the ballast level a ca. 20 cm core layer was present, mainly made up of cobble sized materials (6.4-25 6 cm) interspersed with moderate percentages of pebble sized clasts (0.4-6.4 cm). This level constitutes the penultimate plaza floor at this locus

Artefact recovered from this level included freshwater and marine shell, ceramic sherds, and lithic debitage. Formal artefacts consisted of a chert biface fragment (AP-SF/6), and an exhausted chert biface fragment (AP-SF/7). Ceramics were predominately of the early facet Xakal phase (350 B.C -100 A D). Representatives of

the Sierra, Paila, and Polvero Ceramic Groups were recovered in large numbers Members of the Savana and Jocote Ceramic Groups, Kanluk phase types (900-350 B C), were also present in moderate quantities Given this sample, and the larger sample obtained from contemporaneous A1 structure and courtyard operations, a date of 350 B.C.-100 A.D. is postulated for Floor II construction. Indications are that this surface continued to be employed without major modifications for a considerable length of time, even though evidence for further raising of the courtyard surface exists adjacent to structure A1.

Levels 1 and 2. Level 1, a loose to moderately compact surface/humus layer (see Figure 4.15), contained many roots and rootlets and numerous pebble (0 4-6 4 cm) and a few cobble sized (6.4-25.6 cm) sedimentary clasts. This level was approximately 5-10 cm thick. Due to the poor preservation of the terminal architecture, and the inability of excavators to distinguish a boundary between the Level 1 and the underlying Level 2, these layers were removed together. For this reason they will be dealt with together, rather than as separate entities. Level 2, ca. 15-20 cm thick, consisted mainly of pebble sized (0.4-6.4 cm) materials, with the addition of some cobble sized (6.4-25.6 cm) clasts. Level 2 is best interpreted as the ballast layer of the terminal plaza floor, Floor I. No evidence for a hidden structure was encountered during excavations (e.g. post-holes). This suggests that the open area tested through this unit was indeed an access point between the two plazas.

Ceramics, lithic debitage, and freshwater shells were recovered during the excavation of these two levels. The medial section of an obsidian blade (AP-SF/1) was also collected from these levels. Sherds from these levels were predominantly of the Maxik phase (675-875 A.D.), Cayo Ceramic Group, with the presence of moderate numbers of sherds from the contemporaneous Belize and Dolphin Head Red Ceramic Groups. This assemblage, and the larger, more pristine sample obtained from A1 operations, suggests a date of 675-750 A.D. for construction and initial occupation of this terminal *Ac* Courtyard surface. Elevations indicate that this portion of the courtyard was ca. 25-30 cm lower than the contemporaneous penultimate and terminal surface at the A1 locus.

Structure A3 Operations

Structure A3 is located on the western side of the *Ac* Courtyard, directly across from the previously discussed Structure A1 (see Figure 3.5). As with Structure A1, Structure A3 is best considered a special function structure, being pyramidal in form. However, its overall configuration, being less steep, with a proportionately more elongated base and summit, suggests that this piece of architecture was both functionally and symbolically different from the A1 eastern ancestor shrine. Upon initial consideration, it was felt that this structure had probably served an administrative rather than ritual purpose. Excavation results, particularily the paucity of ritual deposits and the overall morphology of the structure, were to lend credence to this interpretation. Like Structure A1, Structure A3 had been extensively looted via a large trench (Figure 3.5). Fortunately, this looting activity focused on the rear of the structure, hence the frontal primary axis remained intact for explorations. The looter's trench did, however, demolish the majority of the central section of the upper platform. Initially a single 2x2 unit, A3-1, was opened on the summit of Structure A3 (see Figure 4.2). Its purpose was to aid in the recognition of the structure's primary axis. It was hoped that this information would in turn facilitate the placement of an axially aligned trench.

Unfortunately, Unit A3-1 did not provide us with the information required to achieve this goal. We subsequently resumed our exploratory efforts at the A3 locus. These excavations continued to emphasise the exposure of terminal architecture and the isolation of the primary axis. A series of seven (A3-1 thru A3-7) articulated units (see Figure 4.2) were eventually employed to achieve these goals. These units provided horizontal control over the spatial distribution of artefacts. They varied in size (2x2 m or 3x2 m), and were positioned in order to expose large portions of the A3 superstructure and substructure, and the medial section of the axial stairs down to courtyard level. Vertical control was again maintained through the excavation of levels with natural or cultural integrity. Further excavations re-exposed the axial stair units of A3-6 and A3-7. A new 2x2 m unit, A3-8, was also excavated immediately north of Unit A3-6, in order to re-open the central section of the platform (see Figure 4.2). This unit was axially aligned with the A3-6 and A3-7 units, and thus crosscut the boundaries of the previously excavated A3-1 and A3-2 units. Through a combination of these three units (A3-6, A3-7, A3-8) the structure was excavated via a 7x2 m axial trench (see Figure 4.16).

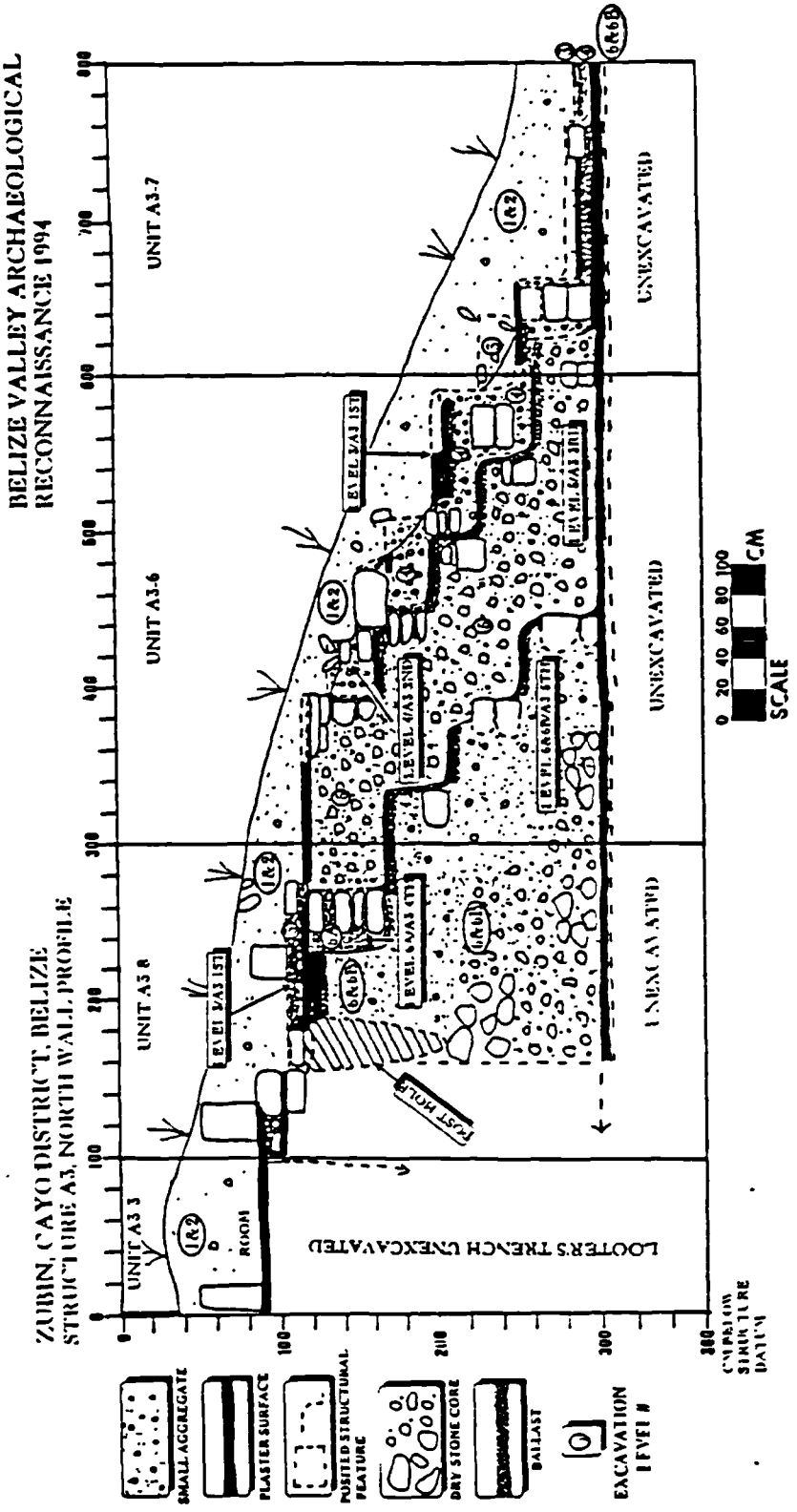


Figure 4.16. Post-excavation profile of Structure A3, looking north.

Unfortunately, time limitations dictated that this locus could not be excavated to bedrock. However, a solid understanding of the temporal development of the *major* architectural features at this locus was still acquired.

The reasons for the Structure A3 investigations were two-fold. First, we endeavoured to acquire data concerning the A3 construction sequence in order to outline the development of this special function structure and its associated courtyard, as well as assess the quality and type of architecture present. With this information a temporal understanding of the timing of major structural modifications could be provided. Concomitantly, assessments of labour investment could also be made. The axial placement of the trench was also considered necessary to uncover any burials or ritual offerings which are normally deposited in this position. Intrasite comparisons could then be made with the A1 structure concerning architectural function and symbolic significance. Similarly, intersite comparisons could also be made, furthering our understanding of local labour investment in architecture, burials, and caches, as well as the degree of access to exotic or other high status items.

Levels 6 and 6B, A3-5th. Levels 6 and 6B represent the earliest Structure (A3-5th) and associated courtyard excavated at the A3 locus (see Figures 4.16 and 4.17). To reiterate, excavations to bedrock were not achieved during A3 investigations. However, given all other operations in the *Ac* Courtyard, it is highly likely that evidence for earlier occupation exists at this location. The A3-5th platform, encountered in Unit A3-8 at ca. 97 cm below the structure datum, was moderately well preserved. Unfortunately, due to the previously discussed looter's trench, much of this upper platform had been destroyed. No evidence indicative of the type of superstructure remains, but later modifications to the structure suggest that a long, narrow, axial room, perpendicular to the primary axis, had once surmounted the A3 substructure. This was probably of pole-and-thatch construction, as no briquettes were recovered which would suggest the presence of a wattle-and-daub superstructure.

To the east the remainder of the platform ended at the nose of a two course stair riser, with a height of ca. 25 cm. The toe of this riser met a terrace at ca. 119 cm This terrace ran 78 cm to the east, where it had been cut through during a later construction event (Level 6A, A3-4th) Indications are that the terrace would have originally stretched another ca. 38 cm, where it would have ended at the verge of a ca. 45 cm, 4 course riser. The foot of this terrace riser met a ca 70 cm deep stair tread at ca 164 cm

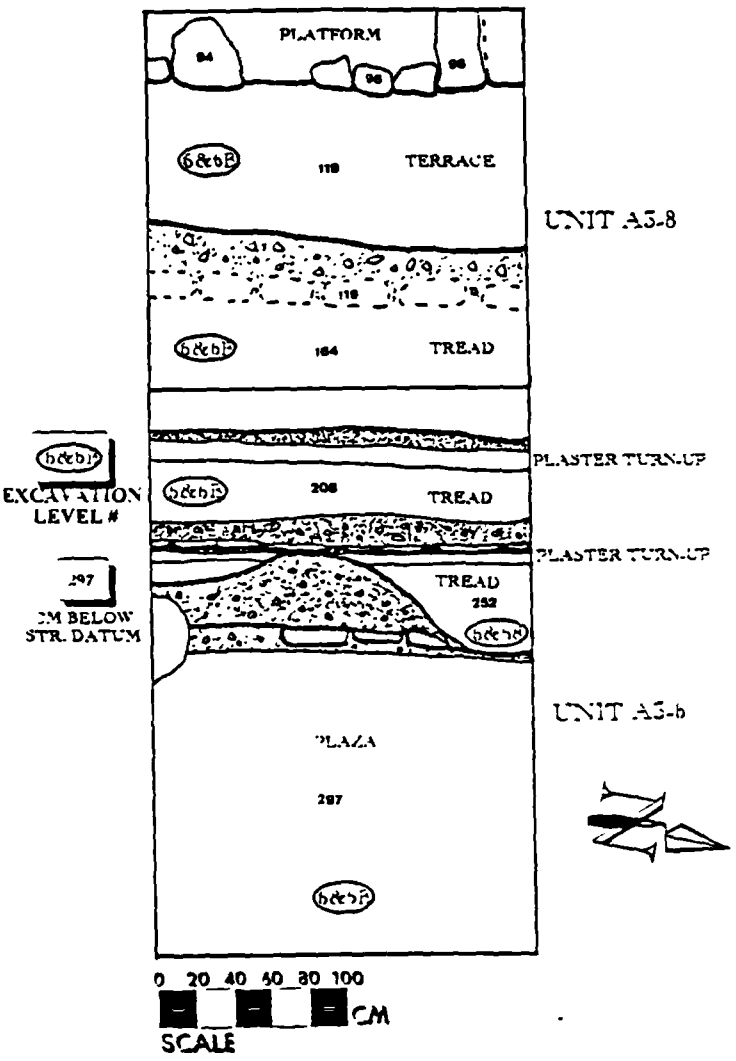


Figure 4 17. Top plan of Levels 6 and 6b, A3-5th

below the structure datum. Two more steps, averaging 40 cm in height, and 49 cm in depth, lead down to the courtyard surface at ca. 297 cm below the structure datum. These latter two steps still exhibited the plaster turn-up which formed the riser toe for each. Taken together, these steps and the overall morphology of the mound suggest that A3-5th was mounted via an inset stair.

In general, the preservation of A3-5th architecture, and associated courtyard, was good. Plaster surfaces averaged ca. 4-5 cm in thickness. A thin 4-5 cm ballast layer, primarily pebble sized clasts (0.4-6.4 cm) underlay the plaster. Underlying this was a ca. 80 cm backing masonry deposit of small aggregate, mainly pebble (0.4-6.4 cm) and cobble (6 4-25.6 cm) sized clasts interspersed within a mortar matrix. Beneath this a layer of dry-stone core masonry was encountered. This deposit was quite thick beneath the upper terrace (ca. 90 cm), and thinned out towards the east (ca. 25 cm). The matrix was dominated by cobble (6.4-25.6 cm) and boulder (>25.6 cm) sized clasts. At ca. 297 cm below the structure datum an undulating, highly compact, deposit of small aggregate was encountered. This was level with the courtyard surface, although it was unprepared. It was evident that this formed the sustaining surface for the A3-5th structure, and indicated that this surface, the courtyard, and the A3-5th structure had been constructed at the same time. No excavations were undertaken beneath this surface.

Ceramic sherds and lithic debitage were moderately abundant in Levels 6 and 6B. Faunal remains were rare. Formal artefacts were limited, and included a chert biface fragment (A3-SF/5), and a chert drill/scraper (A3-SF/6), both recovered from Unit A3-8. The only other artefact of note was a slate celt (A3-SF/7), discovered within Unit A3-6. The ceramic assemblage was dominated by types of the Xacal Ceramic Complex (350 B.C.-350 A.D.). Representatives of the Paila and Sierra Ceramic Groups dominated the sample. Also present were a few intrusive sherds of the later Ahcabnal phase (350-600 A.D.), mainly members of the Pucte and Old River Ceramic Groups. This assemblage, and excavations within this same courtyard surface in other *Ac* operations, suggests that a date of 100-350 A D. is highly likely for A3-5th and associated construction

Level 6A, A3-4th. Level 6A, A3-4th, represented minor yet significant modifications to the A3-5th platform and upper terrace, the stair section continuing to be used in unmodified form (see Figures 4 16 and 4.18). The upper platform was raised ca 12 cm (85 cm Below Structure Datum), and in conjunction a long, narrow, axial room was constructed (ca. 6.00 m long by 0.80 m wide), perpendicular to the primary axis

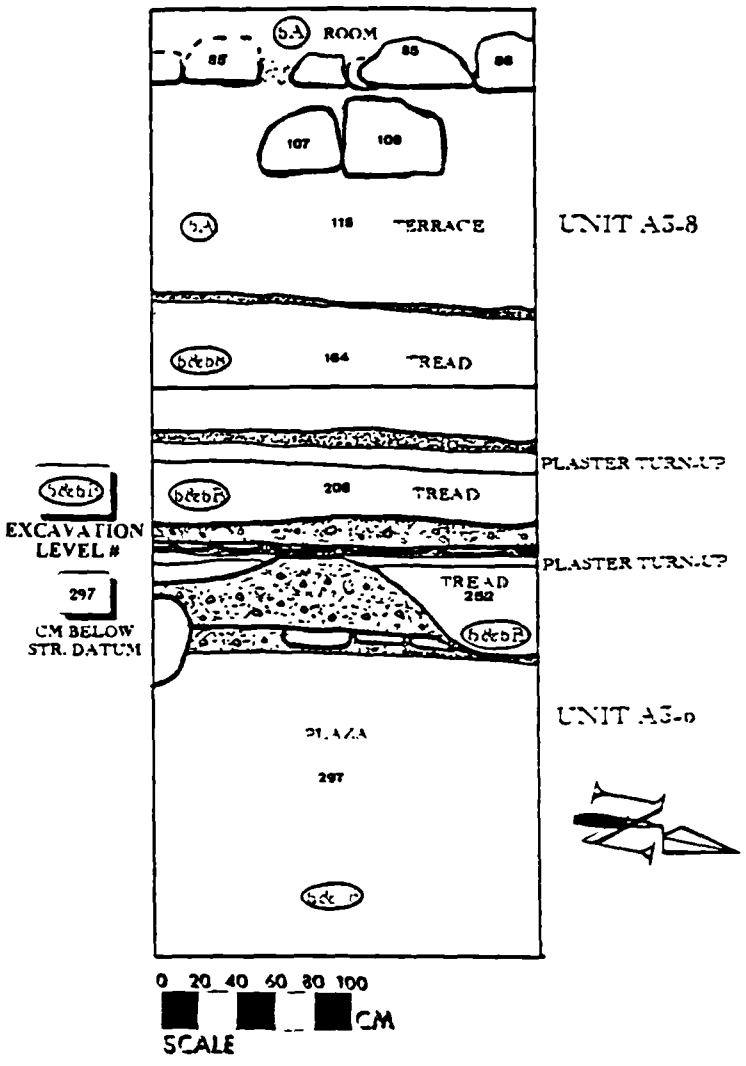


Figure 4.18. Top plan of Levels 6a, 6, and 6b, A3-4th.

The room itself was not vaulted, but rather had low cut stone walls (ca. 34 cm high). Indications are that the upper walls were made of poles, as no briquettes were recovered which would suggest the presence of a wattle-and-daub superstructure. The base of the exterior wall included an outset, which was level with both the nose of the upper stair riser and the room surface (ca. 85 cm below the structure datum). This outset was aligned with the face of the upper stair riser. The new room was accessed via a small, one course, outset step, which lead down to a new terrace surface at 115 cm below the structure datum. The terrace extended ca. 78 cm to the east, where a new, four course stair riser had been constructed. It would appear that the previously employed A3-5th riser, which had once been situated in this same position, was in need of repair. For this reason the new riser was constructed in combination with the new terrace and room modifications. The remainder of the A3-5th architecture and associated courtyard continued to be employed with these new modifications.

The plaster surfaces of the new terrace and room were ca. 5 cm thick, and moderately well preserved. The plaster which had once covered the outset step and room retaining wall had completely deteriorated A thin 8 cm ballast layer, consisting of pebble sized clasts (0.4-6.4 cm), underlay the plaster cap within the room proper. Only a 1-2 cm ballast layer, of similar composition to the above deposit, underlay the terrace plaster cap. The backing masonry for the new stair riser consisted of small aggregate, primarily pebble (0.4-6.4 cm) sized clasts interspersed throughout a mortar matrix. Ceramics and lithic debitage were rare, a reflection of the limited nature of the modifications. No formal artefacts were recovered. The ceramic assemblage was too small to provide an accurate date. However, by taking into account earlier (A3-5th) and subsequent construction (A3-3rd), it would appear that the A3-4th modifications were undertaken sometime during the Ahcabnal phase (350-600 A.D.).

Level 5, A3-3rd. Level 5, A3-3rd, consisted of major modifications to the terrace and stair portions of the earlier A3-5th and A3-4th architecture (see Figures 4.16 and 4.19). Seeing as the looter's trench had destroyed the central portion of the axial room, excavators were unable to assess whether alterations were made to this feature at this time. However, it is clear that the terrace fronting the room was extended 132 cm to the east. This was purely a horizontal modification, as the terrace itself was not raised above its previous A3-4th elevation (115 cm Below Structure Datum). The terrace verge intersected with a four course, ca. 46 cm high riser. From this point four steps led

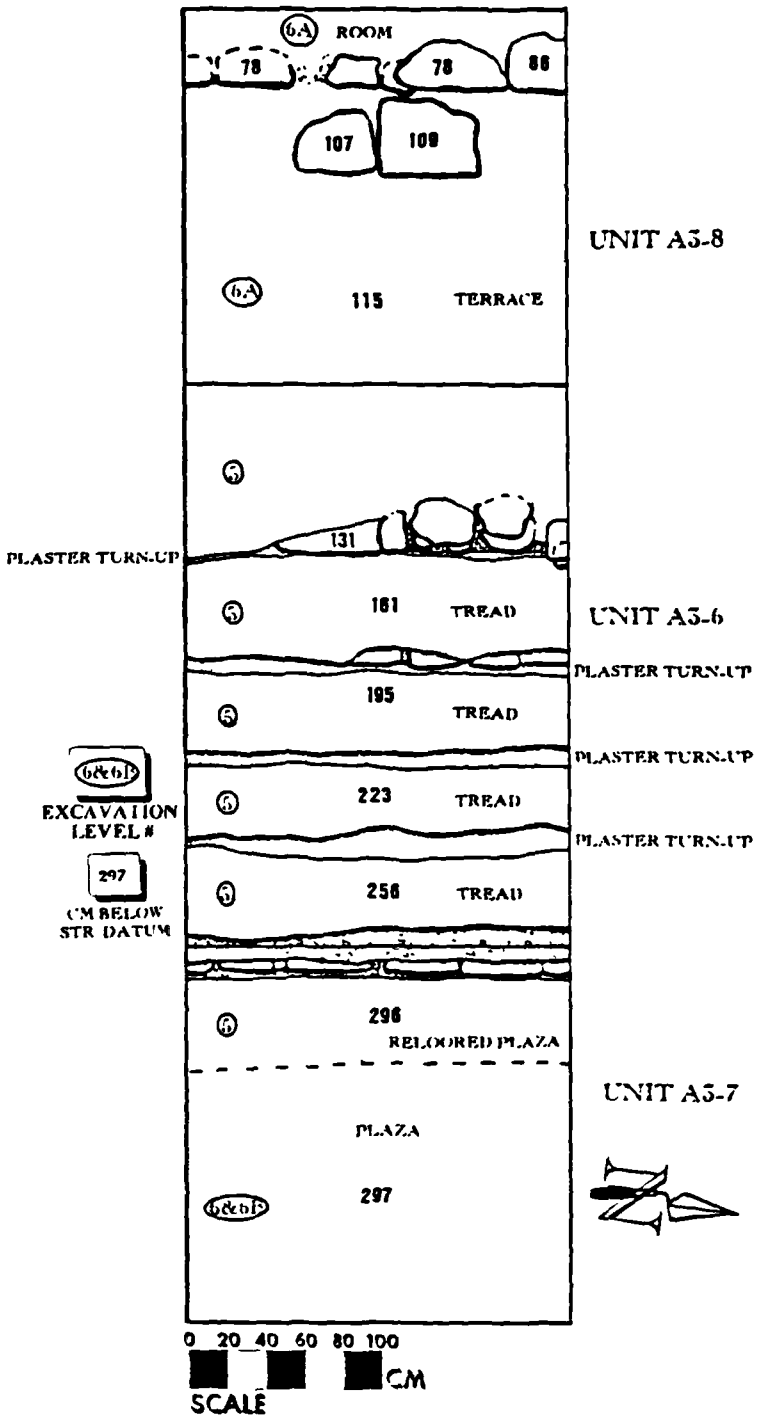


Figure 4 19 Top plan of Levels 6a and 5, A3-3rd.

down to a resurfaced courtyard level at 296 cm Below Structure Datum The four stair risers averaged 33 cm in height, with an average tread depth of 56 cm This would again appear to be an inset stair, given the structure morphology The A3-3rd plaster surfaces were moderately well preserved. In fact, preservation was such that the toes of the stair risers were conserved in the form of intact plaster turn-ups. Average plaster depth was 4-5 cm. The plaster surface was underlain by a thin 4-5 cm ballast layer, dominated by pebble sized clasts (0.4-6 4 cm). The fill for Structure A3-3rd, between ca. 30 and 90 cm in depth, consisted primarily of small aggregate. This matrix was made up of moderate to high percentages of pebble (0.4-6.4 cm) and cobble (6 4-25.6 cm) sized clasts interspersed within a mortar matrix. The old level 6/6B courtyard surface constituted the new sustaining surface for the A3-3rd stair.

Lithic debitage and ceramic sherds were recovered in small percentages within the A3-3rd fill. Faunal remains were rare. Unfortunately, no formal artefacts were encountered. The limited sample of sherds was dominated by Ahcabnal phase types (350-600 A.D.), primarily those of the Old River, Pucte, and Balanza Ceramic Groups. Some representatives of the later Mountain Pine and Zibal Ceramic Groups, Xnipek phase types (600-675 A.D.), were also present. This assemblage suggests a date of 600-675 A.D. for the A3-3rd construction efforts.

Level 4, A3-2nd. Level 4, A3-2nd, comprises the penultimate A3 architecture (see Figures 4.16 and 4.20). In reality, A3-2nd consists of very minor modifications to the previous A3-3rd architecture. Due to the destruction of the central portion of the axial room by the looter's trench, the excavators could not determine what if any alterations had been made to this feature at this time. However, the associated terrace was refloored by the application of a very thin layer of plaster (ca. 115 cm Below Structure Datum). In addition, the stair was completely resurfaced at this point in time through the construction of new stair risers and treads. This activity served to raise the stair to a small degree, and extend it slightly to the east. The fill for these modifications consisted of small aggregate, mainly a mortar matrix with moderate percentages of pebble sized clasts (0.4-6.4 cm). This backing masonry was capped by a ca. 4-5 cm ballast layer, primarily pebble sized clasts (0.4-6.4 cm), and a 4-5 cm thick plaster surface. The courtyard floor was also replastered in conjunction with these modifications. Overall preservation of the A3-2nd architecture was good, considering

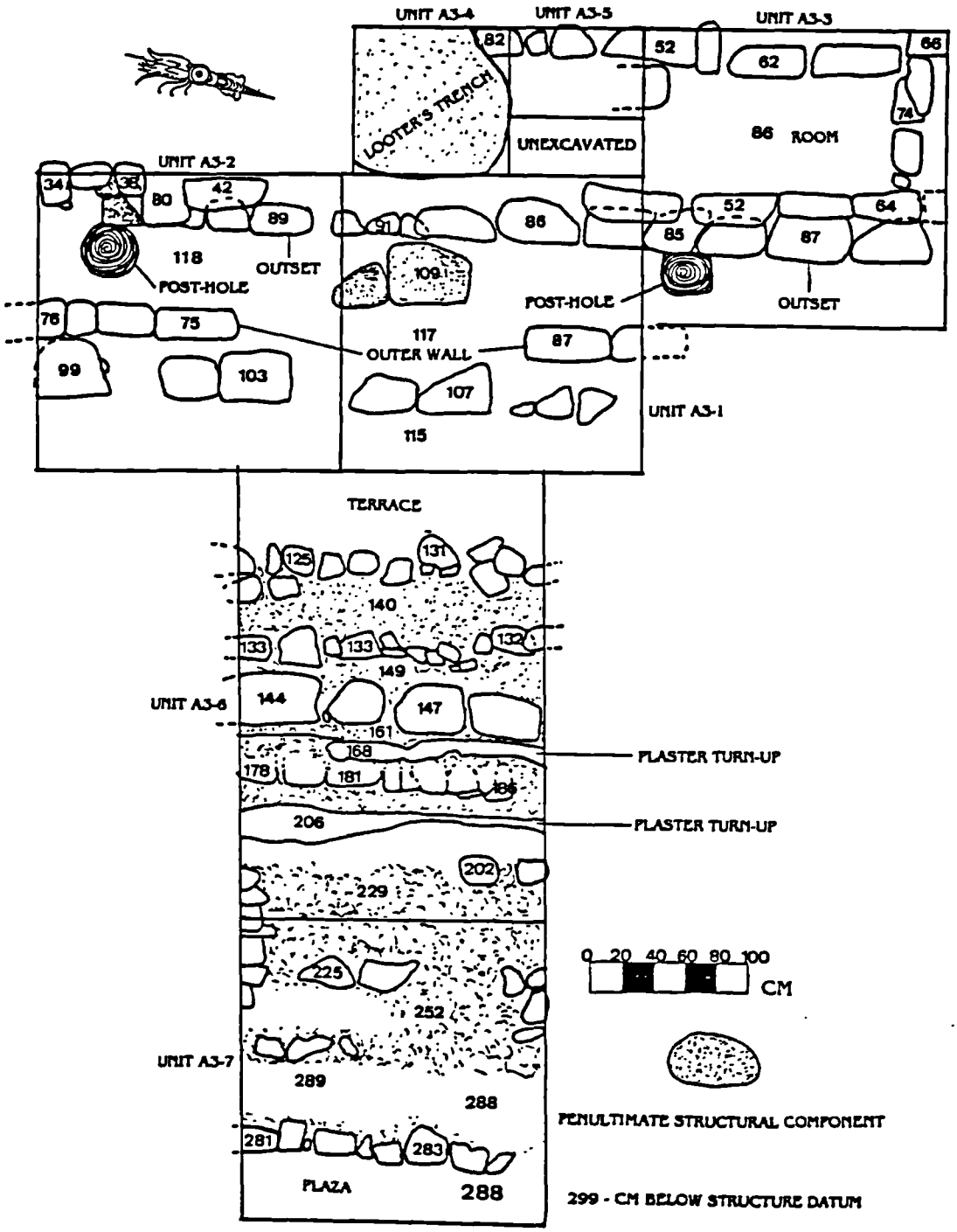


Figure 4.20. Top plan of levels 3 and 4, A1-1st and A1-2nd.

its relative proximity to the surface. Plaster turn-ups, indicative of riser toes, were still discernible in some instances.

Due to the fact that A3-2nd consisted of only minor modifications to earlier architecture, few artefacts were contained within this level. Lithic detritus, faunal remains, and ceramic sherds were rare. No formal artefacts were recovered. The sherd sample was extremely small, and potential mixing with the overlying A3-1st materials is possible, given the difficulty encountered in separating these two construction levels during excavation. The presence of early Maxik phase (675-750 A.D.) Dolphin Head Red ceramics, as well as a number of other Maxik phase sherds of the Cayo and Belize Ceramic Groups, implies a Maxik phase (675-875 A.D.) date for the A3-2nd modifications. Given the absence of types indicative of the earlier Ahcabnal phase (600-675 A.D.), as well as those of the late facet Maxik phase (750-875 A.D.; e.g. Mount Maloney Ceramic Group), and the construction pattern throughout the rest of the site core, a narrower temporal range of 675-750 A.D. is offered for this construction.

Level 3, A3-1st. Level 3, A3-1st, constitutes the terminal architecture at the A3 locus (see Figures 4.16 and 4.20). As with the previously discussed A3-2nd construction, A3-1st is in reality a series of minor modifications to pre-existing architecture. Due to this fact, it was difficult to separate this level from the earlier A3-2nd modifications during excavations. The proximity to the surface also meant that most of the A3-1st plaster surfaces had deteriorated over time, further deterring isolation of this level. The axial room did not exhibit any substantial modifications, although minor alterations may have been made. Unfortunately, the destruction of the central portion of the room by the looter's trench inhibited efforts to ascertain this with any certainty. However, the upper terrace did see substantial changes. The terrace section in Unit A3-8 was elevated by ca. 10 cm. This was evidenced by a remnant ballast layer, consisting of primarily pebble sized clasts (0.4-6.4 cm), exposed at ca. 105 cm Below the Structure Datum. This raising of the terrace concealed the outset step which had previously been employed to reach the upper room level. The new terrace ran ca. 120 cm east from the room outset, where it intersected with the verge of a one course, 10 cm high riser. The terrace foot met the earlier A3-2nd terrace surface at 115 cm Below the Structure Datum.

Two large posts were also established in conjunction with the raising of the western terrace section. The resulting intrusive post-holes were excavated north and

south of the room entrance, adjacent to the room outset (see Figure 4.20). These post-holes were ca. 34 cm in diameter, and ca. 90 cm deep (see Figure 4.16). Given the overall size of these supports, they could have potentially supported a substantial beam-and-mortar roof. However, no other evidence for such a roof exists, and thus this remains purely speculation One might also reason that the large posts were of symbolic significance. Three large post-holes, similarly placed to the two A3 examples, were encountered during excavations of Structure 5C-2nd at Cerros (see Freidel and Schele 1988, Figure 4). These are thought to have held "world trees" (Freidel and Schele 1988:559-561). It is plausible that the A3 post-holes held similar symbolic monuments.

In addition to the elevation of the upper terrace section, and the placement of the two large post-holes, a low screen wall was constructed perpendicular to the room, ca. 75 cm east of the room outset (see Figure 4.20). This one course wall was ca. 20-25 cm high, and ca. 20 cm wide, its top being level with both the interior room surface and the top of the room outset (ca. 85 cm Below the Structure Datum). The newly elevated terrace section acted as the sustaining surface for this screen wall. The post-holes were situated between the screen wall and the room, suggesting that the wall functioned to partially conceal the base of the posts. This was probably done for purely aesthetic reasons. The stair treads of the structure exhibited a few remnants of minor replastering events, also attributable to A3-1st construction Finally, the isolation of a few sections of preserved plaster at ca. 288 cm Below the Structure Datum indicated that the courtyard surface had also been raised at this time. This deteriorated plaster cap was underlain by a ca. 8 cm thick ballast layer, consisting primarily of pebble sized clasts (0.4-6.4 cm).

Ceramics, faunal remains, and lithic debitage were rare in Level 3, A3-1st. This paucity of finds undoubtedly reflects the limited nature of the A3-1st modifications. One artefact of note, a chert biface fragment (A3-SF/3), was recovered from the courtyard deposit in Unit A3-7. The ceramic sample was similarly small. The predominance of sherds representative of the early Maxik phase (675-750 A.D.) Dolphin Head Ceramic Group, as well as a number of contemporaneous Cayo and Belize Ceramic Group varieties, indicates that a Maxik phase (675-875 A D.) date for the A3-1st modifications is likely A more precise date of 675-750 A D is suggested, given the absence of earlier Ahcabnal phase types (600-675 A.D.), as well as types indicative of the late Maxik phase (e g. Mount Maloney Ceramic Group). This date is reaffirmed by the construction sequences formulated during other site core operations.

Levels 1 and 2. Level 1 and 2, the only levels excavated within the series of units in 1993, consisted of a humus and associated fall deposit (see Figure 4.16). Consisting primarily of humus materials interspersed with fine, limestone derived sediments, this deposit ranged from 44-54 cm in depth. Moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized sedimentary clasts were also present throughout. Compaction was medium, and roots and rootlets were prominent in the upper 10-20 cm. Ceramics, and lithic debitage were recovered in small percentages.

Formal artefacts recovered from Levels 1 and 2 consist of a medial section of an obsidian blade (A3-SF/1), discovered in Unit A1-3, and a granite mano fragment (A3-SF/4, Figure 4.21), encountered in Unit A3-6. Another chert biface fragment (A3-SF/2) was also retrieved from the Structure A3 backdirt Unfortunately, one cannot be certain as to which level this artefact originated from. The ceramic assemblage was dominated by types of the Maxik phase (675-875 A.D.).

In summary, from its initial construction to its abandonment, Structure A3 exhibited a consistent morphology. This structure consisted of an elongated, pyramidal substructure with an inset stair, surmounted by a long, narrow, axial room. The superstructure was probably pole-and-thatch, although low stone walls were also employed during much of its use-life. The sequence of modifications acted to extend the front of the structure to the east, with only limited elevational additions. Further alterations, such as the basal room walls, screen wall, and large support posts, represent elaborations rather than drastic changes in architectural form. No burials or ritual deposits were encountered during excavations. Similarly, few artefacts of note were recovered from the fill deposits. Thus, not only does Structure A3 exhibit a different "pyramidal" morphology than Structure A1, it also failed to produce <u>any</u> ritual or ceremonial deposits, the latter common occurrences in Structure A1. Similarly, given its limited "inhabitable" space, and paucity of "domestic" artefacts, Structure A3 contrasts significantly with residential forms such as Structures A4 and B8. Taken together, these comparisons suggest a non-domestic, non-ceremonial role for Structure A3. Indications are, therefore, that this architecture served an administrative purpose. Although it is clearly a much simpler and smaller form of construction, its morphology <u>is</u> suggestive of the administrative range-type structures located in the larger major centres. Its function may therefore have been purely administrative, thus implying that a level of socio-political, and socio-economic decision making was conducted at Zubin. The long,

Figure 4.21. Granite mano fragment (A3-SF/4) from Structure A3 (drawing by Tina Christensen and Gyles Iannone)

narrow, axial room, with its resemblance to similar architectural features in the larger major centres, constituted the appropriate and sanctioned backdrop for such decision making. Similarly, the wide upper terrace comprised the proper and accepted stage from which such charged proclamations should be made.

Structure A4 Operations.

Structure A4, located along the southern boundary of the *Ac* Courtyard, is a long, east-west oriented, bi-level mound of "range-type" form (Figure 3.5). Given its surface morphology, comparative size, and complexity, this structure was initially considered to have been the residence of the primary Zubin family, at least at the termination of site occupation. Excavations confirmed this working hypothesis. Through excavations we also hoped to gather information pertaining to the type, quality, and techniques of construction, as well as recover any on-floor artefact assemblages. Finally, we aimed to collect data indicative of the temporal growth of this architectural feature, as well as obtain a sample of ritual offerings or burials contained within the various construction levels. The production of this multifaceted sample was deemed necessary to properly conduct temporally sensitive, socially oriented, intra- and intersite analyses.

At the outset of 1994 explorations we opened five contiguous units in Structure A4 (see Figure 4.2). These were of varying size, and were situated in order to provide ample surface exposure across the mound. Unit A4-1, a 4x4 m unit, was located on the western portion of the mound, encompassing a large segment of the highest portion of the bi-level. Unit A4-2, another 4x4 m unit, was positioned towards the middle of the structure. Unit A4-3, a 2x4 m unit, was placed near the eastern end of the platform. Unit A4-4, a 1x2.89 m unit, was opened between Units A4-1 and A4-2, effectively joining them. A similar 1x2.13 m unit, Unit A4-6, was employed to connect Units A4-2 and A4-3. Finally, a small 1x1 m unit, Unit A4-5, was utilised to extend the northeastern corner of Unit A4-2 further into the courtyard area, in order to expose an outset stair. These were the primary excavation units, and were employed to expose large sections of the terminal and penultimate architecture. The largest units, A4-1 and A4-2, were both down-sized to 2x4 m units, designated A4-1a and A4-2a, for the purpose of trenching the mound. Similarly, within Unit A4-4, a smaller 0.50x1.00 m subunit (Unit A4-4a)

was excavated after exposure of the terminal architecture in order to clarify the construction sequence. Unit A4-3 was not down-sized, as its initial 2x4m size corresponded with the down-sized A4-1a and A4-2a units. Due to the complexity of the sequence of architectural modifications, and the relative depth of the deposits, bedrock was only reached within the central A4-2a unit. For this reason the level headings in the following summary will generally follow those from the A4-2a sequence. Where equivalent levels within the other units possess distinct level designations, these will also be provided.

Level 10B. Level 10B, a thin clay lense overlying bedrock, was only excavated within Unit A4-2a (Figure 4.22). This deposit, exposed at ca. 416 cm Below the Structure Datum, was highly compact, and brown in colour. Pebble (0.4-6.4 cm) content was low. This deposit overlay an undulating bedrock surface, which dipped to the south. The 10B sediments formed a small ca. 9 cm lense above the lowest portion of the bedrock (at ca. 388 cm Below the Structure Datum). Due to the thinness of this deposit, artefacts were rare. The small ceramic sample does not allow a date to be provided for this level.

Level 10A. Level 10A, the earliest evidence for construction at the A4 locus, was only excavated within Unit A4-2a (Figure 4.22). The surface of this plastered floor was exposed at ca. 377 cm Below the Structure Datum. This floor surface corresponds closely in elevation with the more simplistic Level 7A living surface encountered at the A1 locus, and probably represents an extension of the *Cutz* Courtyard surface to the north. The plastered cap averaged 2-4 cm in thickness. Preservation of this surface was excellent in the northern portion of the unit, but it was completely deteriorated in the south Underlying this plaster cap was a ca. 6 cm thick ballast layer, consisting primarily of pebble (0.4-6.4 cm) sized clasts. A ca 29 cm thick fill deposit had been laid down prior to the ballast and plaster cap. This deposit was composed of highly compact, brownish-black, clay-rich sediments. Pebble (0 4-6.4 cm) sized clasts were present in low to moderate numbers within the matrix. Near the northern terminus of Unit A4-2a a curious rock alignment was partially exposed (see Figure 4.22). These appeared to be sustained by the 10A floor surface. This rock configuration may represent an architectural feature, although according to the excavators the alignment is more than likely coincidental.

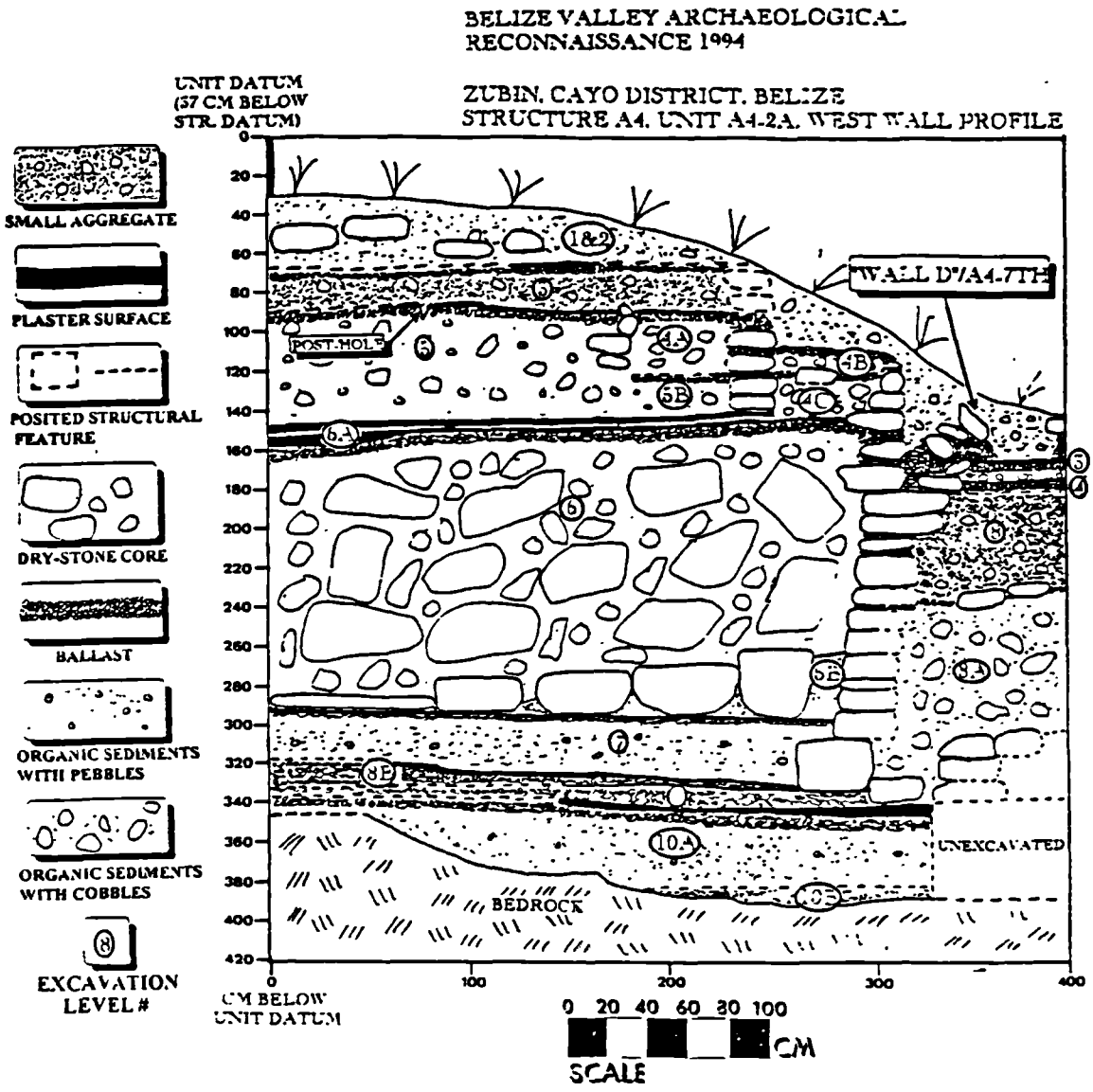


Figure 4.22 Post-excavation profile of Unit A4-2a, facing west

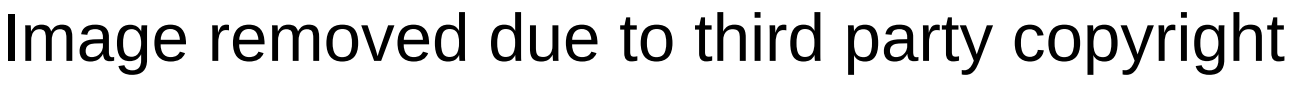


Figure 4.23. Shell artefacts from Structure A4: (a) conch adorno (A4-SF/13); (b) bead (A4-SF/49); (c) carved clam (A4-SF/1), (d) bead (A4-SF/44); (e) conch pendant (A4-SF/43), (f) olive tinkler (A4-SF/40), olive tinkler (A4-SF/39, drawings by Peter McDonagh and Lucinda Blatch).

Lithic debitage was recovered in moderate to large numbers from Level 10A. Faunal remains were less prevalent. Significant artefacts included a figurine body fragment (A4-SF/38), two shell beads (A4-SF/49, Figure 4.23b; A4-SF/44, Figure 4.23d), three obsidian "shatter" fragments (A4-SF/54, A4-SF/59, A4-SF/60), three medial sections of obsidian blades (A4-SF/56, A4-SF/58, A4-SF/62), an obsidian flake (A4-SF/57), three exhausted chert biface fragments (A4-SF/101, A4-SF/143, A4-SF/145), and a chert drill (A4-SF/134). The ceramic sample was large, and consisted primarily of early facet Xakal phase (350 B.C.-100 A.D.) varieties. Sierra Red: Variety Unspecified (buff paste), and Polvero Black: Varieties Unspecified, dominated the assemblage. Numerous other early facet Xakal phase varieties were also represented, but in lesser numbers. Some late facet Kanluk phase (650-350 B.C.)/early facet Xakal phase (350 B.C.-100 A.D.) "transitional" varieties, including Pital Cream: Variety Unspecified, and Flor Cream: Variety Unspecified, were also represented. Late facet Kanluk phase (650-350 B.C.) varieties were also present in significant numbers, particularly members of the Savana Orange: Savana Variety. Taken together, this assemblage suggests an early facet Xakal phase date of 350 B.C.-100 A.D. for the construction of the Level 10A floor.

Level 9. Level 9, a resurfacing of the earlier Level 10A floor, was only excavated within Unit A4-2a (Figure 4.22). The surface of this poorly preserved replastering event was exposed at ca. 366 cm Below the Structure Datum. This probably correlates with the contemporaneous *Cutz* Courtyard surface. The plaster cap was thin (1-2 cm) within the northern portion of the unit, and entirely missing in the southern sector. A ca. 9 cm ballast layer, composed mainly of loosely compact pebble (0.4-6.4 cm) sized clasts within a matrix of dark sediments, underlay the plaster surface. Lenses of lighter, silty soils and marl were also present, as were a limited number of cobble (0.4-6.4 cm) sized clasts.

Lithic debitage was recovered in moderate percentages from this level. Faunal remains were also present in moderate numbers, being particularly prevalent in the southern portion of the unit. One significant find, a bifacial chert chopper (A4-SF/104), exhibiting heavy use , was discovered within the Level 9 fill in Unit A4-2a. The ceramic sherd sample was modest, with concentrations being recognised within the northern sector of the unit. In comparison with the earlier 10A Level, Kanluk phase (900-350 B C.) ceramic types were extremely rare The majority of sherds were early facet Xakal phase (350 B C.-100 A D.), or transitional Kanluk phase/Xakal phase varieties.

Representatives of the Polvero Black: Variety Unspecified, Flor Cream: Varieties Unspecified, Hillbank Red: Hillbank Variety, Iguana Creek White. Iguana Creek Variety, and Pital Cream: Variety Unspecified, dominated the assemblage. No Floral Park Ceramic Complex varieties (see Gifford 1976), indicative of the late facet Xakal phase (100-350 A.D.), were present. Taken as a whole, an early facet Xakal phase date of 350 B.C.-100 A D. is suggested for the Level 9 reflooring event

Level 8. Level 8, the next level recognised within Unit A4-2a, represents the construction of a ca. 143 cm high raised platform (Figure 4.22; Figure 4.26). The raised platform surface, and associated retaining wall, were also exposed in Unit A4-1a (Level 8B; see Figure 4.24), and Unit A4-3 (Level 7B, 6A; see Figure 4.25). This raised platform retaining wall ranged between 9-12 courses high, the basal course being outset ca. 30-40 cm. The raised platform surface, exposed at ca. 215 cm Below the Structure Datum, represented the southern extension of a large sustaining surface which supported architectural features at both the A1 (A1-3rd) and A3 (A3-5th) loci. This courtyard surface was poorly preserved, and was difficult to separate from the underlying ballast layer. Excavations within the raised platform indicated that the upper ca. 58 cm of the fill deposit was comprised of small aggregate, primarily pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts within a mortar matrix (Level 8). Beneath this a further ca. 85 cm thick, loosely consolidated, dry-stone core fill deposit was recognised (Level 8A). This consisted of high percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6) sized clasts within an organic rich sediment matrix.

To the south of the raised platform, a new plaster floor surface was also excavated within Unit A4-2a (Level 8B; see Figures 4.22 and 4.26). Only the surface of this floor was exposed in the middle of Units A4-1a (Level 8; see Figure 4.24) and A4-3 (Level 7; see Figure 4.25). This floor would appear to represent either the contemporaneous *Cutz* Courtyard surface, or a terrace feature. Level 8B is best considered a reflooring of the previous Level 9 surface. This surface, exposed at ca. 357 cm Below the Structure Datum, was poorly preserved near the retaining wall basal outset, preservation being slightly better near the middle of the unit The plaster cap varied between 2-4 cm in thickness. This was underlain by a ca. 5-6 cm thick ballast layer, composed mainly of pebble (0.4-6.4 cm) sized clasts.

Lithic debitage, including both cores and flakes, was recovered in large numbers from Levels 8, 8A, and 8B. Faunal remains were also present, being particularly

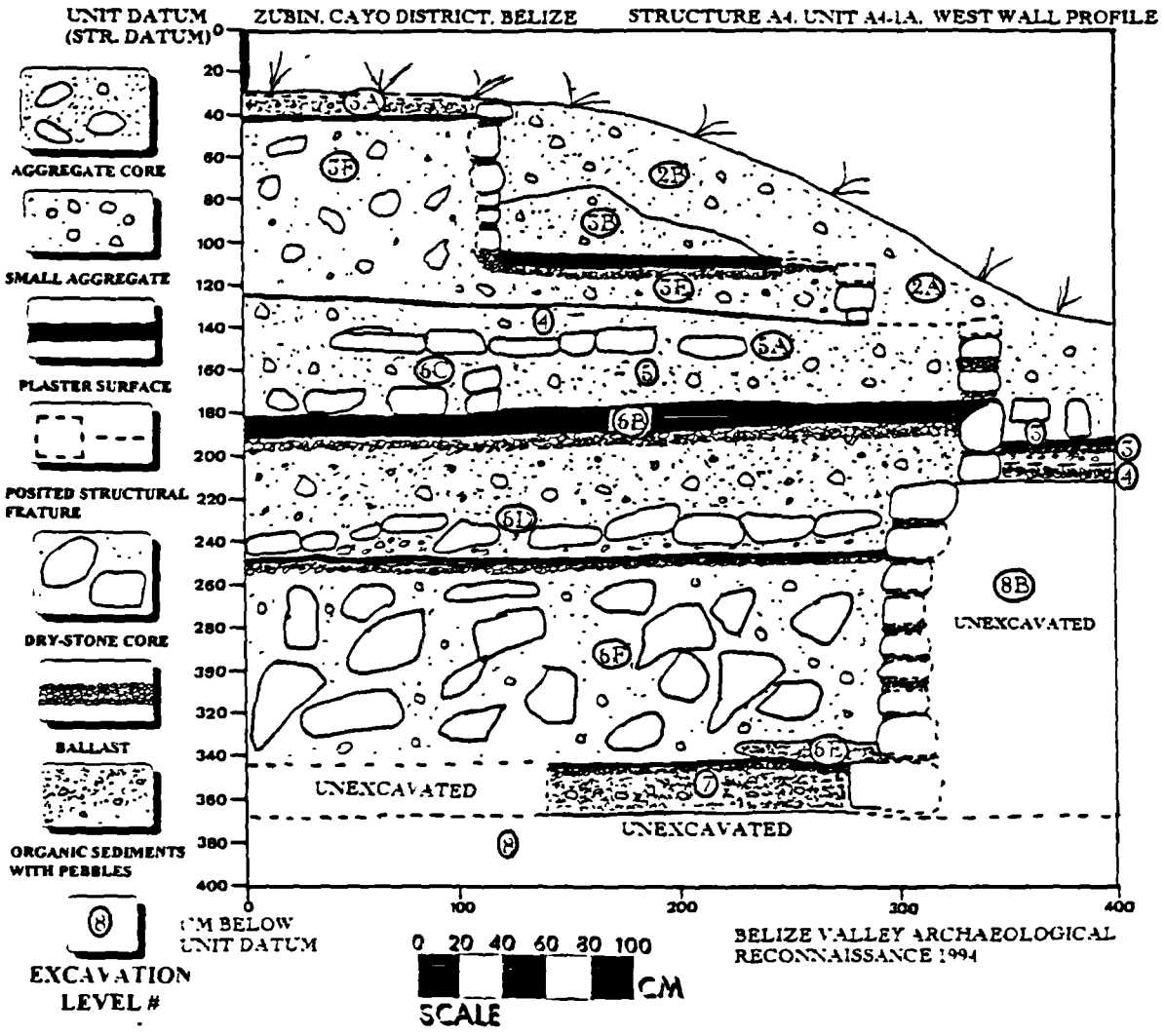


Figure 4 24. Post-excavation profile of Unit A4-1a, facing west.

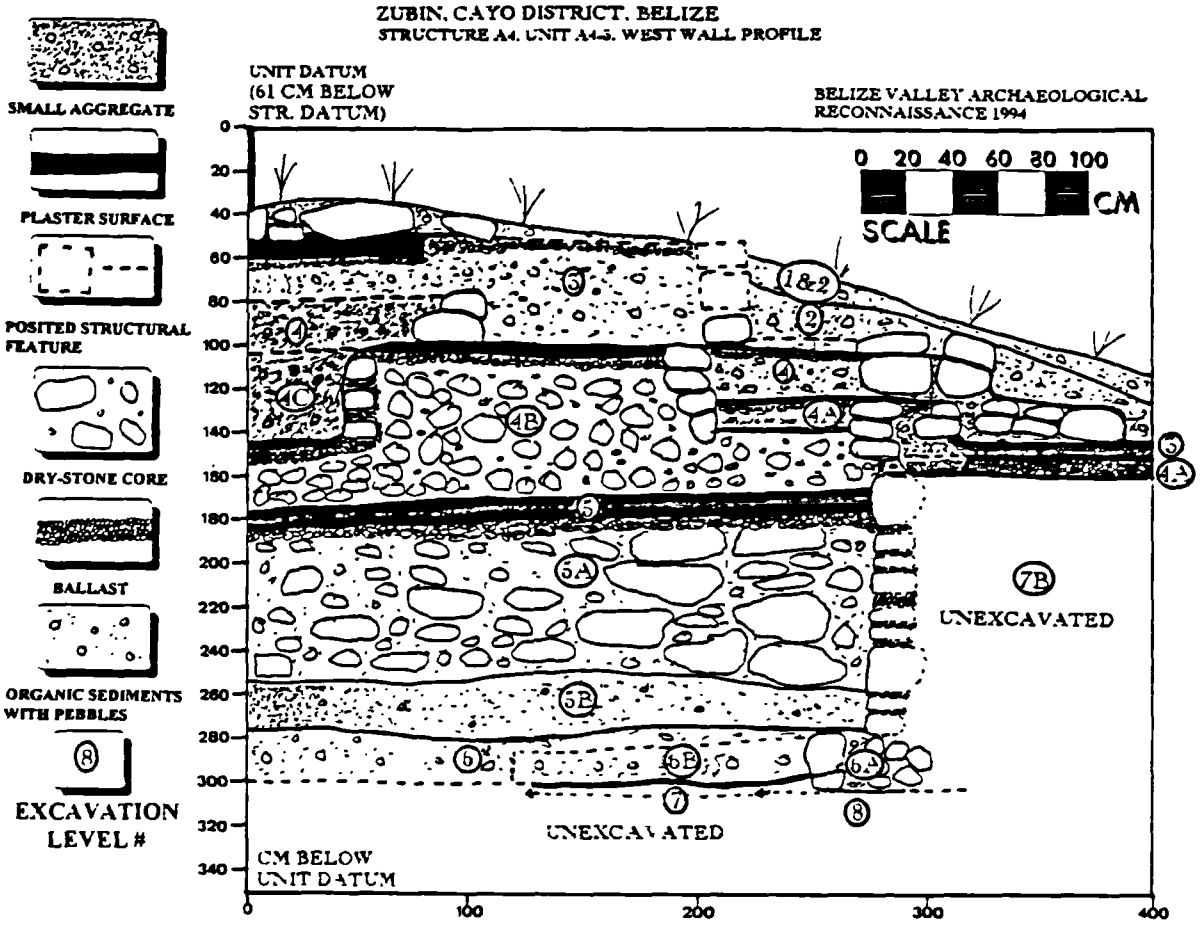


Figure 4.25. Post-excavation profile of Unit A4-3, facing west

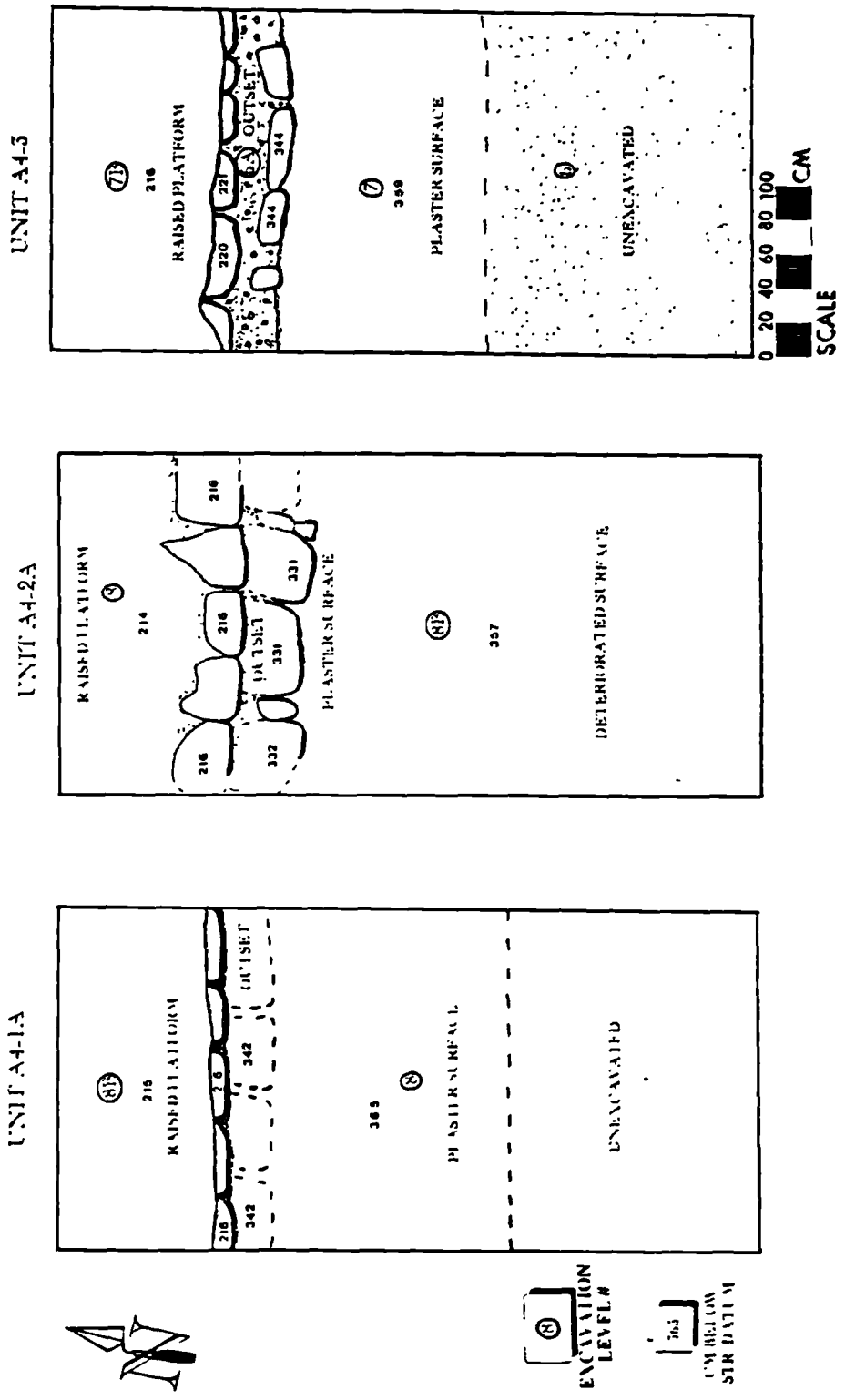


Figure 4 46 Top plan of Level 8, Structure A4 (spacing of units not to scale)

prevalent near the southern terminus of the unit. Significant artefacts encountered during excavations in Unit A4-2a included a granite grinding/polishing stone (A4-SF/75), and a chert biface fragment (A4-SF/79), from the raised platform upper fill (Level 8), and a chert drill/burin (A4-SF/140), from the southern, lower floor (Level 8B) Ceramics were abundant throughout this level. Late facet Xakal phase (100-350 A D) sherds were prominent, including representatives of the San Antonio Golden Brown: San Antonio Variety, San Antonio Golden Brown: Variety Unspecified (Orange Interior), Aguacate Orange: Variety Unspecified, Hillbank Red: Hillbank Variety, and Mateo Red-on Cream: Variety Unspecified (buff paste). Ahcabnal phase (350-600 A D) types were also present in significant numbers, including Balanza Black: Variety Unspecified, Balanza Black· Cadena Creek Variety, Minanha Red: Variety Unspecified, and Pucte Brown: Variety Unspecified (orange paste). This assemblage suggests a late facet Xakal phase date of 100-350 A.D. for the construction of the raised platform and associated floor surfaces.

Level 7. Level 7, excavated in Units A4-2a (Figure 4.22), A4-1a (Level 7, Figure 4.24), and A4-3 (Levels 6, 6B, Figure 4.25), represents a ca. 30 cm reflooring of the lower floor surface south of the raised platform (see Figure 4.27). This reflooring event concealed the platform retaining wall basal outset. The floor itself was of tamped earth construction. Indications are that it may have functioned as a simple terrace, as it appears to have been too high to have been part of the *Cutz* Courtyard surface. The tamped earth surface was exposed at between 326-340 cm Below the Structure Datum within the three primary A4 excavation units. The deposit consisted primarily of compact, dark, organic rich sediments Pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts were present in small numbers. Charcoal flecks were found throughout the deposit. Within Unit A4-2a a one course retaining wall was found to rest on the "terrace" surface. This was faced on the north and east, and appears to represent a small platform which had once surmounted the terrace. Indications are that during subsequent construction this platform was partially dismantled for cut-stones.

Within Level 7 lithic debitage was present in moderate numbers Faunal remains were relatively abundant. Excavations produced a number of significant finds. Within Unit A4-1a (Level 7) a proximal section of an obsidian blade (A4-SF 50), a medial section of an obsidian blade (A4-SF/51), and a drilled ceramic sherd were recovered. Excavations within Unit A4-2a (Level 7) produced two medial sections of obsidian

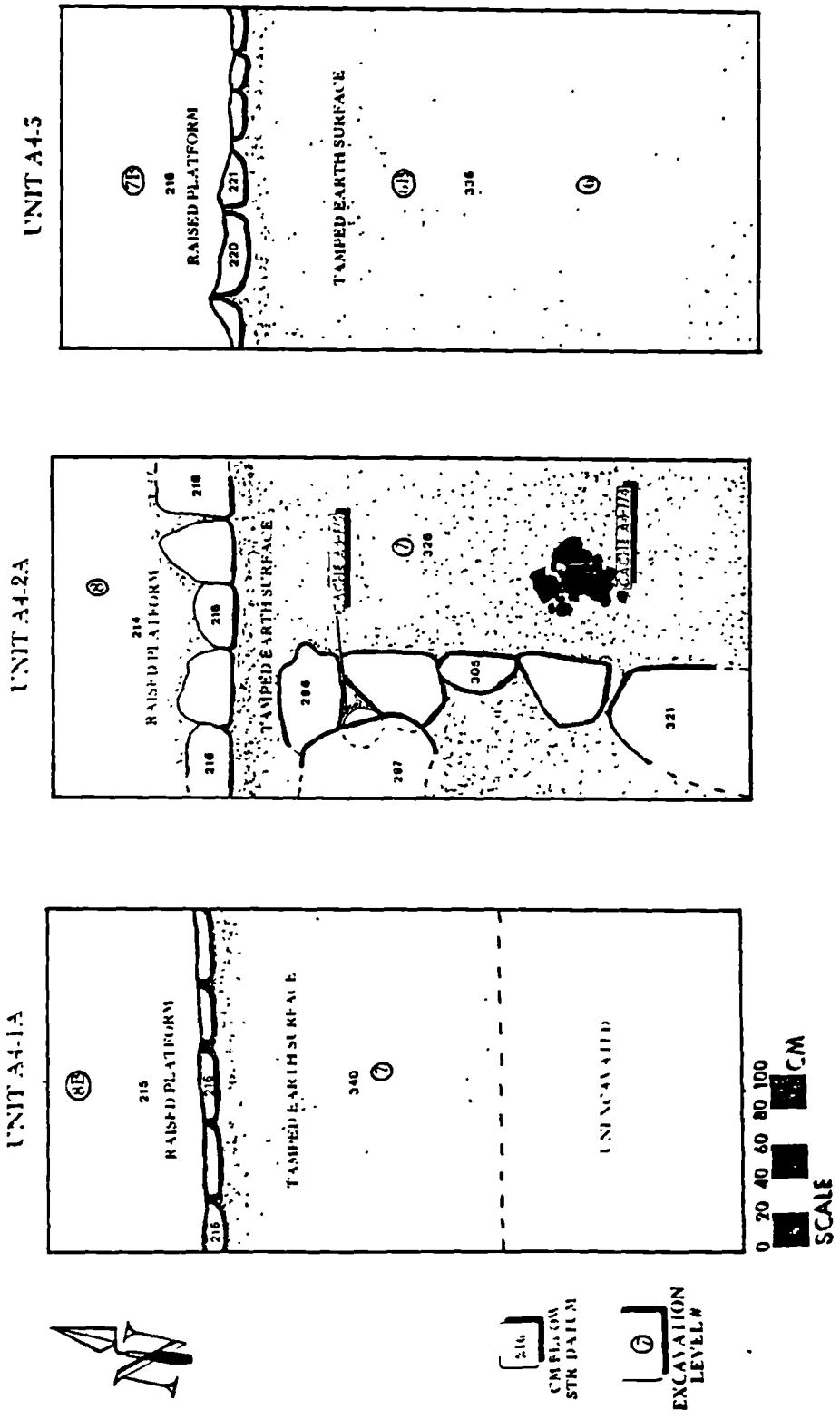


Figure 4.27. Top plan of Level 7, Structure A4 (spacing of units not to scale).

Figure 4.28. Granite metate fragments from Structure A4. (a) A4-SF/78; (b) A4-SF/124 (drawings by Tina Christensen and Gyles Iannone)

blades (A4-SF/63, A4-SF/64), and an obsidian flake (A4-SF/65). Finally, Unit A4-3 (Levels 6, 6B) produced an unidentifiable drilled bone (A4-SF/47), three medial sections of obsidian blades (A4-SF/66, A4-SF/67, A4-SF/68), a proximal section of obsidian blade (A4-SF/69), and a granite metate fragment (A4-SF/78, Figure 4.28a). The ceramic sample was comparably large, and dominated by an almost equal mix of Ahcabnal phase (350-600 A D.) and Xnipek phase (600-675 A.D.) varieties. A limited number of late facet Xakal phase (100-350 A D) sherds were also present. Prominent Ahcabnal phase varieties included Pucte Brown: Variety Unspecified, Minanha Red: Minanha Variety, and Balanza Black: Variety Unspecified. The most prevalent Xnipek phase varieties were Sotero Red-Brown: Sotero Variety, Orange-walk Incised. Orange-Walk Variety, Mountain Pine Red: Mountain Pine Variety, and Macal Orange-Red: Macal Variety. This sample suggests a Xnipek phase date of 600-675 A.D. for the construction of the Level 7 tamped earth surface and small platform. One cache (*A4-F 5*) was encountered during excavation of this level (see Chapter 5).

Level 6B. Level 6B, a midden deposit, was excavated within Units A4-2a (Figure 4.22), A4-1a (Level 6E, Figure 4.24), and A4-3 (Level 5B, Figure 4.25). This midden was deposited south of the raised platform retaining wall following the termination of use of the earlier Level 7 surface (Level 6 and 6B surface in Unit A4-3). Within the three primary excavation units the top of this deposit was exposed at between 300-330 cm Below the Structure Datum (Figure 4.29). The deposit varied in its horizontal extent. Within Units A4-1a and A4-2a the southern terminus of the midden lense was located at 80-160 cm south of the raised platform retaining wall. In contrast, the deposit extended across the entire A4-3 unit south of the raised platform retaining wall. Similarly, the thickness of the midden varied from 30 cm adjacent to the A4-2a retaining wall, to 10 cm within Unit A4-1a. The midden lense was generally loosely compact, and consisted of greyish, ashy sediments. Pebble (0.4-6 4 cm) sized clasts were present in moderate numbers, cobbles (6 4-25.6 cm) being rare.

Lithic debitage was relatively prominent within the midden lense. Faunal remains were abundant, including both shell, and bone of numerous species. Significant finds recovered from the midden deposit included two proximal sections of obsidian blades (A4-SF/42, A4-SF/48) from Unit A4-1a (Level 6E), a granite metate fragment (A4-SF/124, Figure 4 28b) from Unit A4-2a (Level 6B), and a jadeite inlay (A4-SF/41), a conch shell pendant (A4-SF 43, Figure 4 28e), a modified avian? bone (A4-SF/46), a

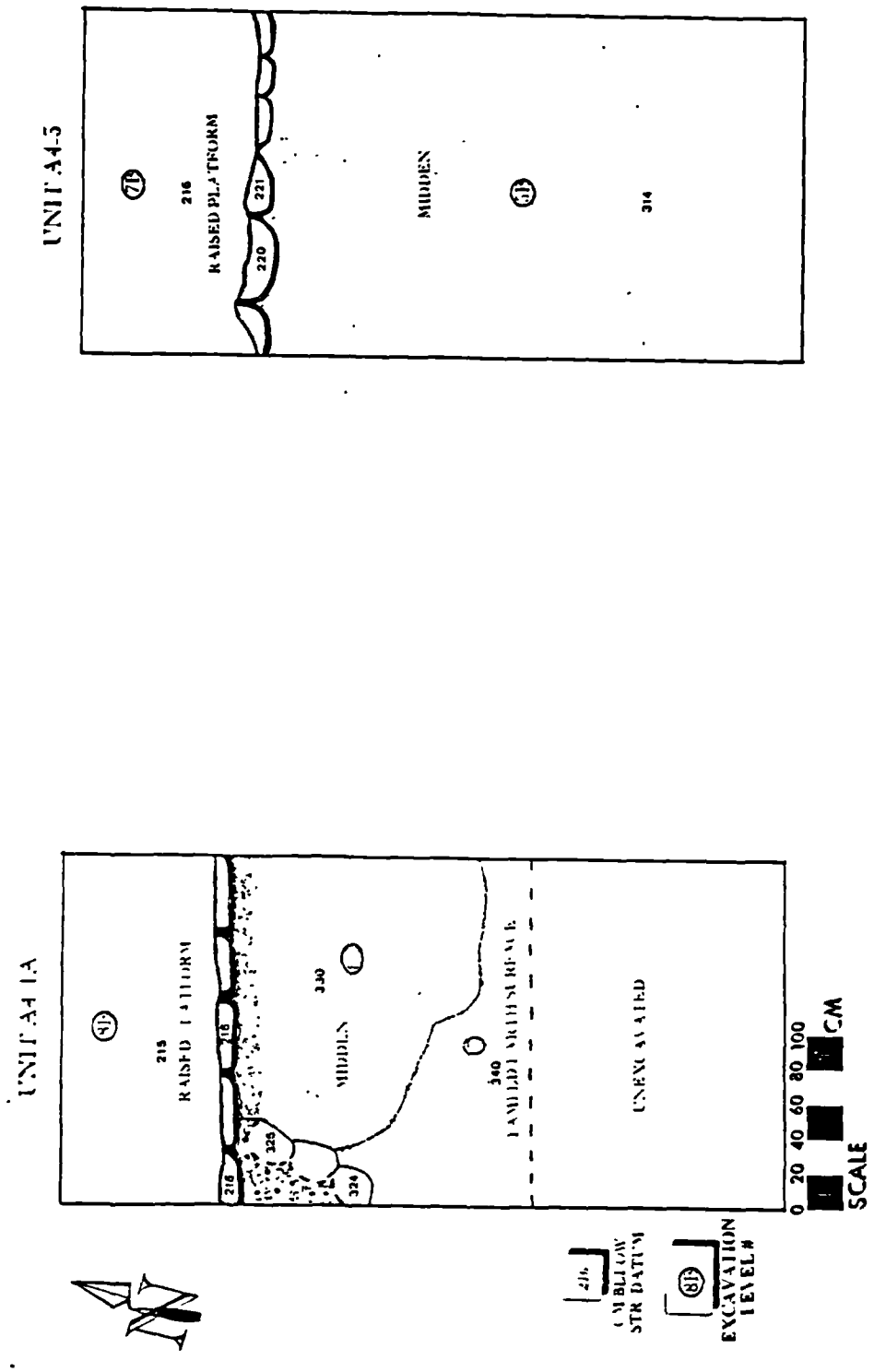


Figure 4.29. Top plan of the midden deposit, Level 6b (spacing of units not to scale).

medial section of obsidian blade (A4-SF/53), and an obsidian core fragment (A4-SF/146), from Unit A4-3 (Level 5B). The sherd sample was moderately large, and was dominated by Ahcabnal phase (350-600 A.D.) and Xnipek phase (600-675 A.D) varieties. The most prominent Ahcabnal phase variety was the Pucte Brown: Variety Unspecified. Xnipek phase varieties included members of the Mountain Pine Red: Mountain Pine Variety, Sotero Red-Brown: Sotero Variety, and Orange-Walk Incised: Orange-Walk Variety. This ceramic assemblage suggests that the midden formed sometime during the Xnipek phase (600-675 A.D.).

Level 6, A4-8th. Level 6, A4-8th, represents the first building platform constructed at the A4 locus (Figure 4.30). This platform was exposed within Units A4-2a (Level 6, figure 4.22), and A4-4 (Level 5, Figure 4.31a), at ca. 181 cm Below the Structure Datum. Although this building platform was only raised 35 cm above the associated courtyard surface (Level 8), it still represents a significant construction event, being ca. 145 higher than the previous Level 7 tamped earth surface. The northern face of the platform, consisting of a ca. 35 cm , three course retaining wall, was sustained by the earlier Level 8, *Ac* Courtyard raised platform retaining wall. The plaster surface of A4-8th exhibited differential preservation, but was generally poorly preserved. No evidence for post-holes was obtained, suggestive of the presence of a perishable superstructure. However, it is likely that preservation inhibited the isolation of these features, and that a wattle-and-daub or pole-and-thatch structure did surmount the building platform. The thickness of the plaster cap varied from 1-2 cm in the north to ca. 6 cm in the south. This surface was underlain by a ca. 8-9 cm ballast layer, consisting primarily of pebble (0.4-6.4 cm) sized clasts. The ca. 132 cm thick fill deposit beneath the ballast was of loosely compact, dry-stone core construction. Boulder (>25.6 cm) and cobble (0.4-25.6 cm) sized clasts were prevalent in this matrix Air pockets were commonly found between the larger fill constituents.

In conjunction with the construction of the A4-8th building platform, two flanking terraces were also erected These were partially exposed within Units A4-1a (Level 6F, Figure 4.24) at ca. 243 cm Below the Structure Datum, and A4-3 (Level 5A, Figure 4.25) at ca. 234 cm Below the Structure Datum (Figure 4.30). These had been raised ca. 90-100 cm above the top of the preceding midden deposit. A partially intact, one course wall (Level 6D) was found to rest on the terrace surface discovered in Unit A4-1a This may indicate that an ancillary structure of some sort originally surmounted

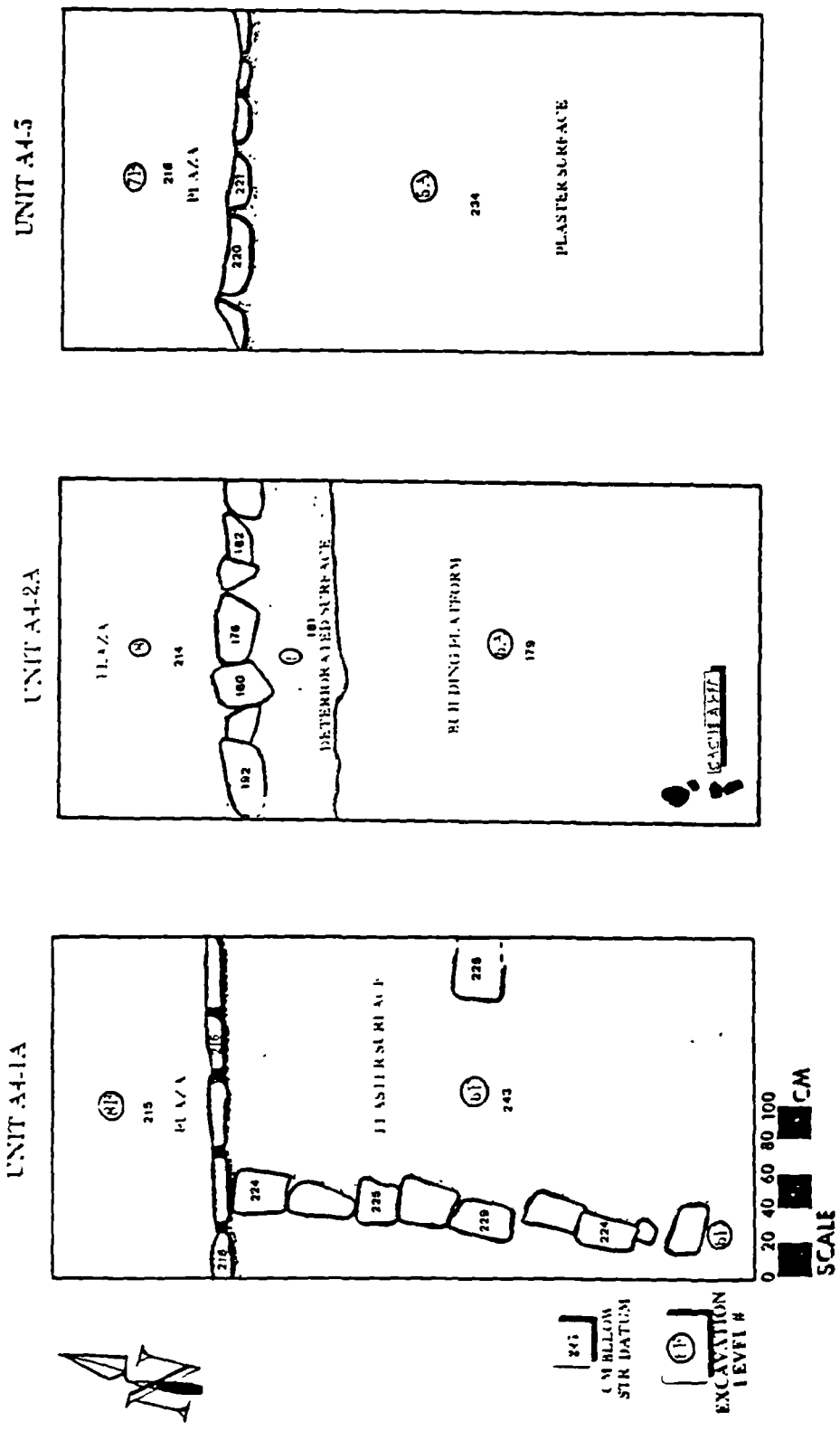


Figure 4.30. Top plan of A4-8th (spacing of units not to scale).

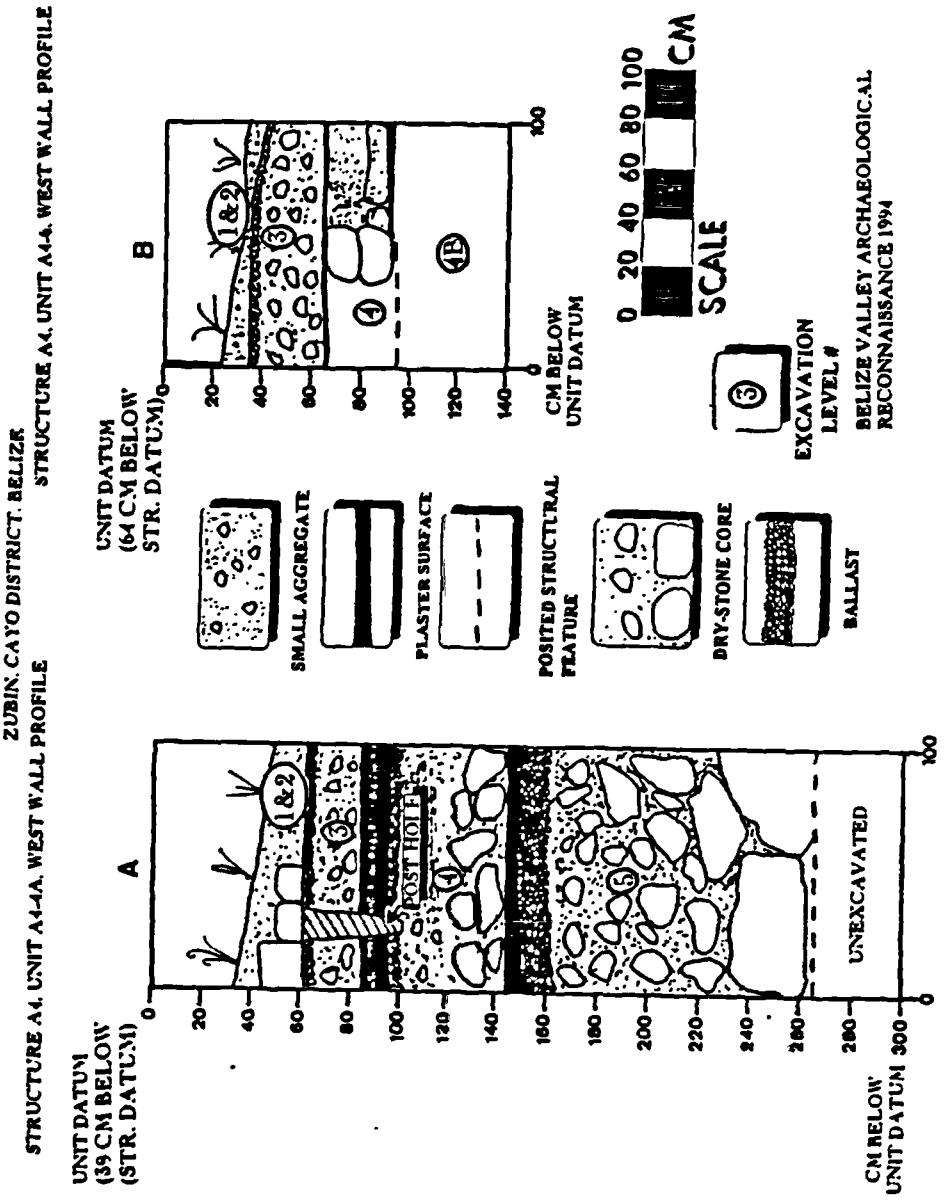


Figure 4.31. Post-excavation profiles of Unit A4-4a (a), and Unit A4-6 (b), facing west.

the terrace west of A4-8th. However, due to apparent dismantling of the architecture during subsequent construction, we were unable to determine with any degree of certainty the size or overall shape of this architectural feature. The A4-8th flanking terraces were ca. 60 cm lower than the associated A4-8th building platform, and ca 25 cm below the *Ac* Courtyard surface to the north. Thus, from the *Ac* Courtyard surface one could easily step up onto the A4-8th building platform, or down onto the associated flanking terraces. The flanking terrace surfaces were moderately well preserved, being ca. 3-5 cm thick. This surface was underlain by a ca. 5-10 cm ballast layer, composed mainly of pebble (0.4-6.4 cm) sized clasts, and a ca. 65-90 cm thick fill deposit of dry-stone core. The dry-stone core deposit beneath the terraces was consistent with that found to underlay the A4-8th building platform. Boulder (>25.6 cm) and cobble (6.4-25.6 cm) sized clasts dominated this loosely compacted matrix. Air pockets were prevalent between the large clasts.

Lithic debitage was recovered in moderate percentages from all A4-8th deposits. Faunal remains were rare. Significant artefacts included a proximal section of obsidian blade (A4-SF/52), found near the Level 6D one course wall in Unit A4-1a, a proximal section of obsidian blade (A4-SF/37), a granite mano fragment (A4-SF/84, Figure 4.32), a granite metate fragment (A4-SF/135), a chert scraper (A4-SF/123), a slate "wrench" fragment (A4-SF/136), and a chert biface fragment (A4-SF/137), retrieved from the Level 6/A4-8th building platform in Unit A4-2a, and two granite metate fragments (A4-SF/71 [Figure 4.33], A4-SF/72), a quartzite metate fragment (A4-SF/73, Figure 4.34), and a chert scraper (A4-SF/147), from the Level 5A terrace fill in Unit A4-3. The ceramic sample was of moderate size, and was dominated by Xnipek phase (600-675 A.D.) varieties. Sherds of the Xnipek Ceramic Complex, Sotero Red-Brown: Sotero Variety, Mountain Pine Red: Mountain Pine Variety were particularly prominent. Also present were a few sherds indicative of the ensuing Maxik phase (675-875 A.D.), including representatives of Belize Red: Belize Variety, and early facet Maxik phase, Dolphin Head: Dolphin Head Variety. Considered in combination with the postulated dates for subsequent architectural modifications (see below), this ceramic assemblage suggests an early facet Maxik phase date of 675-750 A.D for the construction of the A4-8th building platform and associated flanking terraces One cache (*A4-F 4*) was recovered during Level 6, A4-8th excavations (see Chapter 5).

Figure 4.32 Granite mano fragment from A4-8th (A4-SF/84, drawing by Tina Christensen and Gyles Iannone)

Figure 4.33. Granite metate fragment from A4-8th (A4-SF/71; drawing by Tina Christensen and Gyles Iannone).

Figure 4 34. Quartzite metate fragment from A4-8th (A4-SF/73; drawing by Tina Christensen and Gyles Iannone).

Figure 4.35. Section of Saxche Orange Polychrome: Variety Unspecified bowl, from A4-8th (drawing by Nicholas Crow).

Of particular interest was the recovery of four sherds from the fill deposit beneath the A4-8th platform (Level 6). These derive from a small polychrome bowl, clearly of the Xnipek Ceramic Complex, Saxche Orange Polychrome: Variety Unspecified (Figure 4.35). The four sherds joined together to form a large section of the original vessel. This bowl exhibited an orange slipped interior, with a black rim band. On the exterior, beneath the black rim band, there were three red rim bands of varying widths. The middle band, being substantially wider than the other two, contained two pseudoglyphs executed in black. The main body of the vessel possessed an elaborate rendering in red, black, and grey. As only a small fragment of this image remained it is impossible to determine with certainty what this depiction portrays. However, Nickolai Grube (personal communication to Jaime Awe, 1994) has suggested that the image represents the "celestial bird". Beneath this main feature two further red bands, one thin, the other slightly thicker, and a wide black band, encircled the vessel. These sherds clearly derive from a vessel of the Naranjo Area Group, an Early Classic (ca. A.D. 500-600 A.D.) ceramic style of wide distribution in the Maya lowlands (Reents-Budet 1994:203-207). The vessels of this ceramic group often contain pseudoglyphs arranged in pairs of two (see Reents-Budet 1994:206, Figures 5.45, 5.46). Reents-Budet (1994:203) notes that this ceramic group also exhibits restricted iconographic imagery, which includes a depiction of the Jaguar God of the Underworld with a "personified wing of the celestial bird." This may in fact be the image portrayed on the Zubin vessel fragments.

A4-7th. A4-7th, excavated as Level 6A and "Wall D" in Unit A4-2 (Figure 4.22), Level 6B and 6C in Unit A4-1a (Figure 4.24), and Level 5 in Unit A4-3 (Figure 4.25 , represents a series of modifications to the A4-8th building platform and associated flanking terraces (Figure 4.36). Within Unit A4-2a the northern face of the A4-8th building platform was extended ca. 30-35 cm northward through the addition of a new platform facing wall (Wall D). This new wall was simply constructed in front of the older A4-8th platform retaining wall, and subsequently plastered over. In conjunction with this a relatively thin 4-5 cm replastering of the A4-8th building platform was initiated. This surface (Level 6A), exposed at ca. 179 cm Below the Structure Datum, was moderately well preserved Unfortunately, no post-holes were recognised to reaffirm the idea that this building platform was surmounted by a pole-and-thatch or wattle-and-daub superstructure. However, the past presence of such a feature seems likely. At this time the A4-7th building platform was also extended to the west, into the

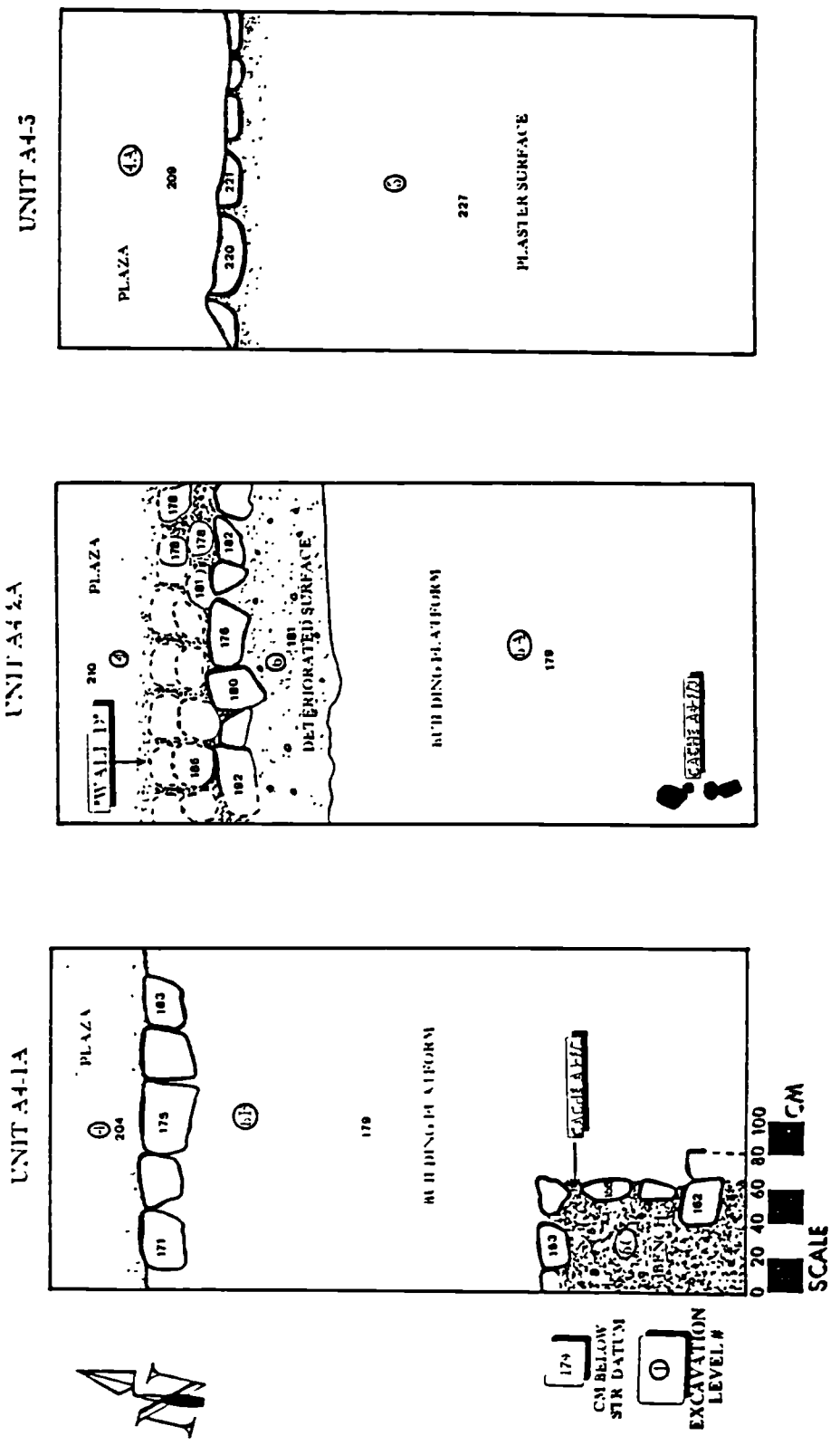


Figure 4.36. Top plan of A4-7th (spacing of units not to scale).

area of Unit A4-1a (Level 6B). At this locus a well preserved, ca. 10 cm thick, plaster floor was encountered at ca. 179 cm Below the Structure Datum. This plaster cap was underlain by a ca. 6-8 cm ballast layer, composed primarily of pebble (0.4-6.4 cm) sized clasts, and a ca. 48 cm thick fill deposit. This latter construction layer consisted of aggregate core, mainly pebble (0.4-6.4 cm) and cobble (6.4-25 6 cm) sized clasts within a mortar matrix. These features, in combination, acted to raise the new A4-7th building platform extension ca. 64 cm above the previous A4-8th flanking terrace surface (Level 6F).

It would also appear that an interior bench was constructed on this new platform extension (Level 6C). This was suggested by the discovery of the basal two courses of an apparently bench sized feature within the southwestern corner of Unit A4-1a This "bench" was in a poor state of preservation, undoubtedly due to the partial dismantling of the feature for reuse of the cut-stones during subsequent construction. In association with the western extension of the A4-7th building platform, the A4-8th eastern flanking terrace was replastered. The moderately well preserved plaster cap, exposed at ca. 227 Below the Structure Datum within Unit A4-3 (Level 5), was ca. 5-6 cm thick, and was underlain by a thin 2-3 cm ballast layer. The latter deposit was composed primarily of pebble (0.4-6.4 cm) sized clasts. In combination these two deposits formed a ca. 8 cm thick reflooring event.

In conjunction with the A4-7th building platform and flanking terrace modifications, the *Ac* Courtyard was resurfaced. This was exposed within Unit A4-1a (Level 4), Unit A4-2a (Level 4), and Unit A4-3 (Level 4A). The ca. 1-2 cm thick plaster cap of this new courtyard surface was highly deteriorated, but was consistently exposed at between 204-210 cm Below the Structure Datum. This plaster surface was underlain by a ca. 5-9 cm thick ballast layer, comprised primarily of pebble (0.4-6.4 cm) sized clasts. In total, this appears to have been a ca 10 cm thick replastering event

Lithic debitage was recovered in moderate percentages from the A4-7th fill. Faunal remains were less prevalent. The only significant artefact, a chert biface fragment (A4-SF/97), was recovered from the fill beneath the building platform extension in Unit A4-1a (Level 6B) The ceramic sample was relatively small, and was dominated by Xnipek phase (600-675 A D.) and Maxik phase (675-875 A D) varieties Dominant Xnipek phase varieties included Macal Orange-Red Macal Variety, and Sotero Red-Brown. Sotero Variety. Prominent Maxik phase varieties included Belize Red·

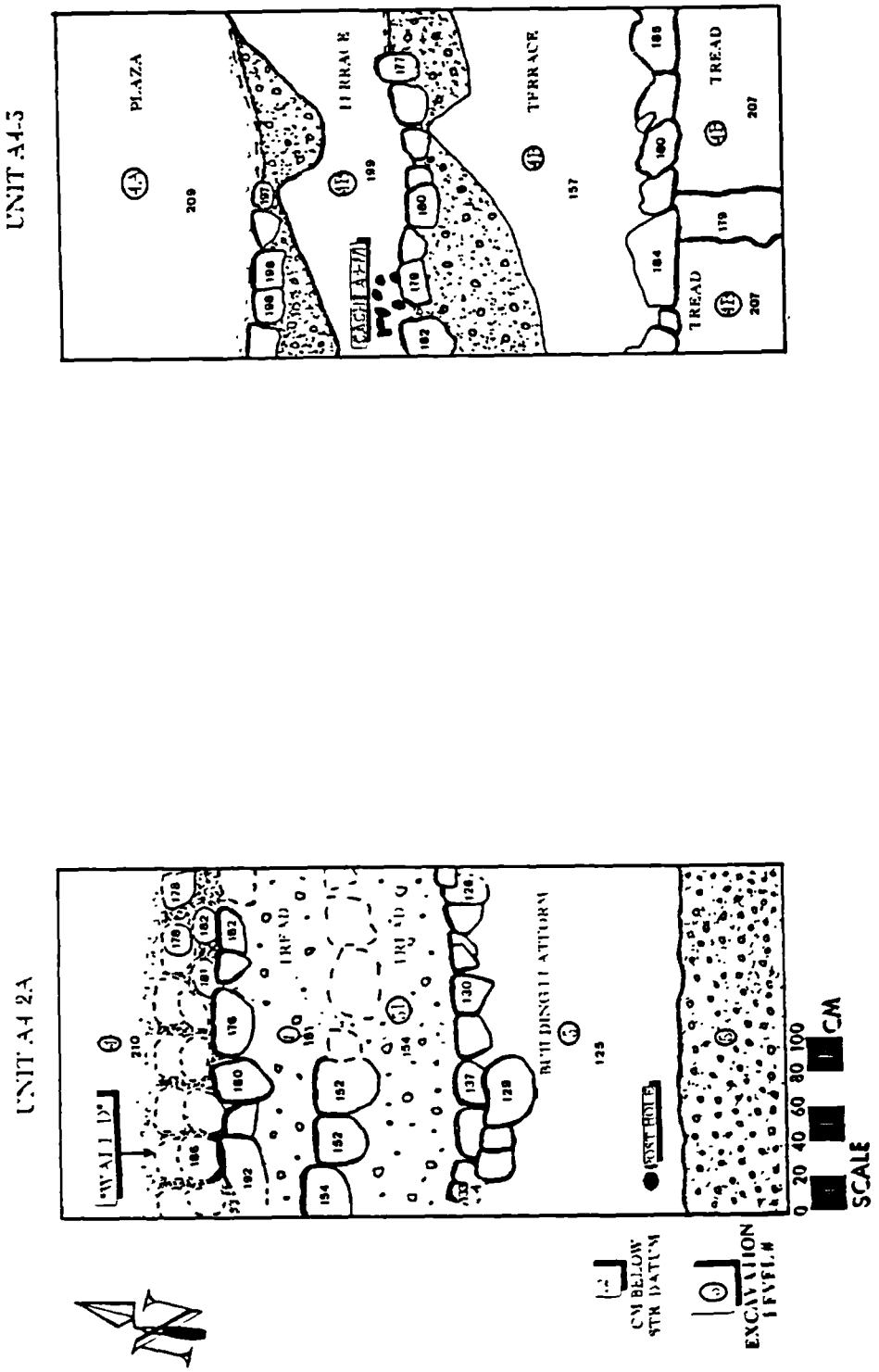


Figure 4.37. Top plan of A4-6th (spacing of units not to scale).

Belize Variety, and Dolphin Head Red: Dolphin Head Variety. Taken in combination, the ceramic assemblage and architectural sequence suggests a date of 675-750 A D. for the construction of A4-7th. One cache (*A4-F 2*) was encountered during excavation of A4-7th (see Chapter 5).

A4-6th. A4-6th, a series of structural modifications to the previous A4-7th architecture (see Figures 4.37), was excavated in Units A4-2a (Levels 5 and 5B, Figure 4.22), A4-3 (Level 4B, Figure 4.25), A4-4a (Level 4, Figure 4.31a), and A4-6 (Level 4B, figure 4.31b). Within Unit A4-2a the central portion of the previous A4-7th building platform was raised ca. 54 cm. The western section of the building platform (Unit A4-1a, Levels 6B and 6C) continued to be employed in unaltered form at its lower, A4-7th elevation (ca. 179 cm Below the Structure Datum). This new A4-6th upper building platform surface was exposed at ca. 125 cm Below the Structure Datum in Unit A4-2a (Level 5) and at 129 cm Below the Structure Datum in Unit A4-4a (Level 4). This upper platform surface was moderately well preserved. A post-hole was encountered within the southwest corner of the unit, intrusive into the A4-6th plaster surface. However, due to its shallow depth, it is probably related to later construction Therefore no evidence exits for a pole-and-thatch or wattle-and-daub superstructure, although it is likely that such a structure surmounted the A4-6th building platform. The consistent occurrence of an unprepared surface at 55-60 cm from the southern terminus of the unit was suggestive of the past presence of a bench feature (see Figure 4.37). This feature was probably dismantled for cut-stones during the ensuing construction stages.

The upper platform ran ca. 120 to the south, where it terminated at a three course, ca. 29 cm stair riser. The toe of the riser met a ca. 70 deep stair tread at ca. 154 cm Below the Structure Datum The surface of this tread was highly deteriorated. To the north the nose of a second two course riser was encountered This riser was ca. 25 cm high, and probably led down to the earlier A4-7th building platform surface (Level 6A) at 179 cm Below the Structure Datum. This surface had deteriorated, leaving the underlying Level 6/A4-8th surface exposed at ca. 181 cm Below the Structure Datum. This earlier surface functioned as the basal stair tread. This tread was ca. 60-70 cm deep, and terminated at the nose of a final ca. 31 cm riser that led down to the Level 4, *Ac* Courtyard surface at ca. 210 cm Below the Structure Datum. The A4-6th plaster surfaces were generally poorly preserved. The remnant plaster cap that did remain on the upper building platform was ca. 1-3 cm thick. This overlay a ca. 5 cm ballast layer,

composed primarily of pebble (0.4-6.4 cm) sized clasts. Beneath this was a ca 48 cm thick dry-stone core deposit This fill was loosely compact, and consisted mainly of pebble (0.4-6.4 cm) and cobble (6 4-25.6 cm) sized clasts. The fill beneath the upper stair tread (Level 5B) was consistent with that previously described.

Within Units A4-3 and A4-6, the A4-6th additions (Level 4B) acted to create a formal entrance between the *Ac* and *Cutz* Courtyards. The preceding A4-7th terrace (Level 5) was raised ca. 52 cm above the *Ac* Courtyard surface to ca. 157 cm Below the Structure Datum (Level 4B). This elevation was consistent with the upper step for the A4-6th building platform exposed within Unit A4-2a (Level 5B), ca. 32 cm below the surface of the A4-6th upper building platform within that same unit (Level 5), and ca. 20 cm above the western building platform surface in Unit A4-1a (Level 6B). Within Unit A4-6 a ca. 30 cm high, two course, north/south retaining wall was exposed. This represented the eastern extent of the higher A4-6th building platform surface exposed within A4-2a.

Within Unit A4-3 the new terrace step was ca. 150 cm deep. To the north the verge of the terrace met a ca. 42 cm high, four course riser. The foot of the terrace riser met a ca. 83 cm deep tread at ca. 199 cm Below the Structure Datum. This tread in turn terminated at the nose of a short, ca. 10 cm high, two course riser, which led down to the *Ac* Courtyard surface at ca 209 cm Below the Structure Datum (Level 4A). To the south the terrace verge led to a ca. 50 cm high, three course riser. The foot of this terrace riser terminated at a tread surface at ca. 207 cm Below the Structure Datum. The tread was bisected by a ca. 28 cm high, medial balustrade. This balustrade, the top of which was exposed at ca. 179 cm Below the Structure Datum (level with the building platform surface in Unit A4-1a), was ca. 35 cm wide. The stair tread ran ca. 56 cm to the south, where the southern wall of Unit A4-3 was located. This precluded further investigations in this area, but indications are that this tread represents the upper step of a stair which led down to the *Cutz* Courtyard surface.

In general, the plastered surfaces of this formal access stair were well preserved. The southern stair and balustrade, and upper terrace step, exhibited ca. 5-6 cm thick plaster caps. The northern step also contained preserved plaster, but this surface was much thinner (ca. 1-2 cm thick) than in other areas A thin ca 4-6 cm ballast layer, composed mainly of pebble (0 4-6.4 cm) sized clasts, underlay the plaster surfaces. The fill (Level 4B) deposit beneath this varied in thickness, depending on whether it was

beneath the terrace or the steps This deposit consisted of loosely compact dry-stone core. Pebble (0 4-6 4 cm) and cobble (6.4-6.4 cm) sized clasts were prominent

Lithic debitage was recovered in moderate percentages from the A4-6th levels. Faunal remains were present but rare. All significant artefacts came for Unit A4-2a, and where limited to a serpentine polishing/grinding stone (A4-SF/90), and a chert biface fragment (A4-SF/110), discovered in building platform fill (Level 5), and a ceramic disk (A4-SF/148), retrieved from the fill beneath the upper step (Level 5B). The ceramic sample obtained from the A4-6th architecture was extremely large. Xnipek (600-675 A.D.) and Maxik phase (675-875 A.D.) varieties dominated the sample. Prominent Xnipek phase varieties included Zibal Unslipped: Varieties Unspecified, Jones Camp Striated: Jones Camp Variety, Macal Orange-Red· Macal Variety, and Sotero Red-Brown: Sotero Variety. Prevalent Maxik phase varieties included Belize Red: Belize Variety, Benque Viejo Polychrome; Variety Unspecified, Mount Maloney Black: Mount Maloney Variety, Tu-Tu Camp Striated: Tu-Tu Camp Variety, Alexanders Unslipped: Alexanders Variety, and Dolphin Head Red: Dolphin Head Variety. The dominance of the transitional Sotero Red-Brown: Sotero Variety, and early facet Maxik phase, Dolphin Head Red: Dolphin Head Variety, and the incipient presence of the late facet Mount Maloney Black: Mount Maloney Variety, suggest that a date of 675-750 A.D. for the A4-6th structural modifications seems likely. A solitary cache (*A4-F 3*) was discovered during excavations of A4-6th (see Chapter 5).

A4-5th. A4-5th, a series of minor modifications to the central portion of the building platform (Figure 4.38), was exposed in Units A4-2a (Levels 4A and 4C; Figure 4.22) and A4-4a (Figure 4.31a). Within Unit A4-2a the previous A4-6th building platform was extended ca. 30 cm to the north. This expansion of the building platform area was achieved by increasing the height of the A4-6th upper stair tread by ca 29 cm, bringing it level with the A4-6th platform surface (ca 125 cm Below the Structure Datum). In conjunction with the upper building platform extension (Level 4A), the A4-6th basal step was also raised ca. 25 cm in height (Level 4C). The top of this new tread was exposed at ca. 155 cm Below the Structure Datum. The plaster surface of the platform extension (Level 4A) was poorly preserved, being 1-2 cm thick This was underlain by a ca 3-4 cm thick ballast layer, mainly comprised of pebble (0 4-6 4 cm) sized clasts. The fill deposit beneath this was ca. 24-26 cm thick, and consisted of loosely compact, dry-stone core. Pebble (0.4-6 4 cm) and cobble (6.4-25 6 cm) sized

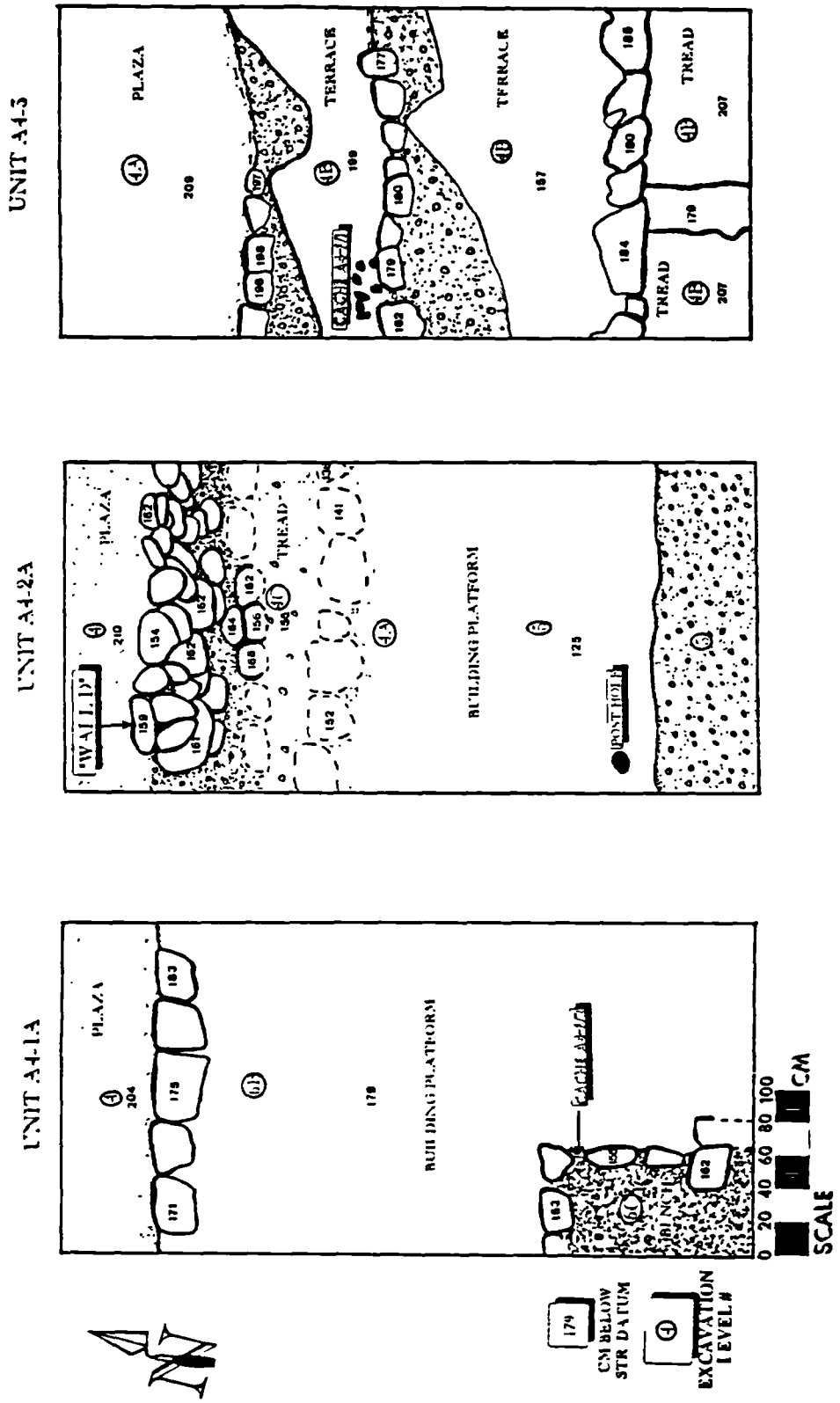


Figure 4.38. Top plan of A4-5th (spacing of units not to scale).

clasts were prominent in the deposit. The plaster, ballast, and fill deposits for the basal step modification (Level 4C) generally conform to this description, although thickness' may vary slightly.

In combination, these two A4-5th modifications acted to enlarge the inhabitable platform space, and decrease the number of steps necessary to ascend the building platform. In conjunction with these modifications, portions of the upper building platform were apparently resurfaced, as evidenced by excavations in Unit A4-4a (Figure 4.31a). This was a relatively thin reflooring, consisting of a ca. 2-3 cm plaster cap underlain by a ca. 2-3 cm ballast layer. The latter deposit was composed primarily of pebble (0.4-6.4 cm) sized clasts. In total, this constituted a 5-6 cm thick replastering event. No evidence for post-holes was found in association with the A4-5th modifications. Thus no tangible evidence exists for pole-and-thatch or wattle-and-daub superstructure. However, post-holes may have fallen outside of the excavation units in some instances, or have been unrecognisable given the preservation of the plastered surface (e.g. the plaster around a post-hole may be the first to deteriorate). In any event, it seems likely that some type of perishable superstructure did surmount the A4-5th building platform. It is also probable that the postulated A4-6th bench continued to be employed at this time.

Lithic debitage was recovered in small percentages in the A4-5th fill, undoubtedly a reflection of the limited nature of these modifications. Faunal remains were similarly rare. The only significant artefacts discovered during the excavation of A4-5th architecture came from beneath the fill of the building platform extension (Level 4A). These consisted of a chert scraper/drill (A4-SF/111), a medial section of obsidian blade (A4-SF/21), a granite mano fragment (A4-SF/125, Figure 4.39a), and a chert biface fragment (A4-SF/95). The size of the ceramic sample was also limited by the extent of the modifications. Xnipek (600-675 A.D) and Maxik phase (675-875 A.D.) varieties dominated the assemblage. The most prevalent Xnipek phase variety was Sotero Red-Brown: Sotero Variety. The most prominent Maxik phase varieties were Belize Red: Belize Variety, and Dolphin Head Red: Dolphin Head Variety. Considered in conjunction with the postulated dates for the immediately preceding and subsequent construction phases, a date of 675-750 A.D. is suggested for the A4-5th modifications

A4-4th. A4-4th, a further series of structural modifications, was exposed in Units A4-1a (Levels 5, 5A, 4, 3, Figure 4.24), Unit A4-2 (Levels 4B, 3, Figure 4.22), Unit

Figure 4 39. Groundstone artefacts from Structure A4. (a) granite mano fragment (A4-SF/125); granite metate fragment (A4-SF/74; drawings by Tina Christensen and Gyles Iannone)

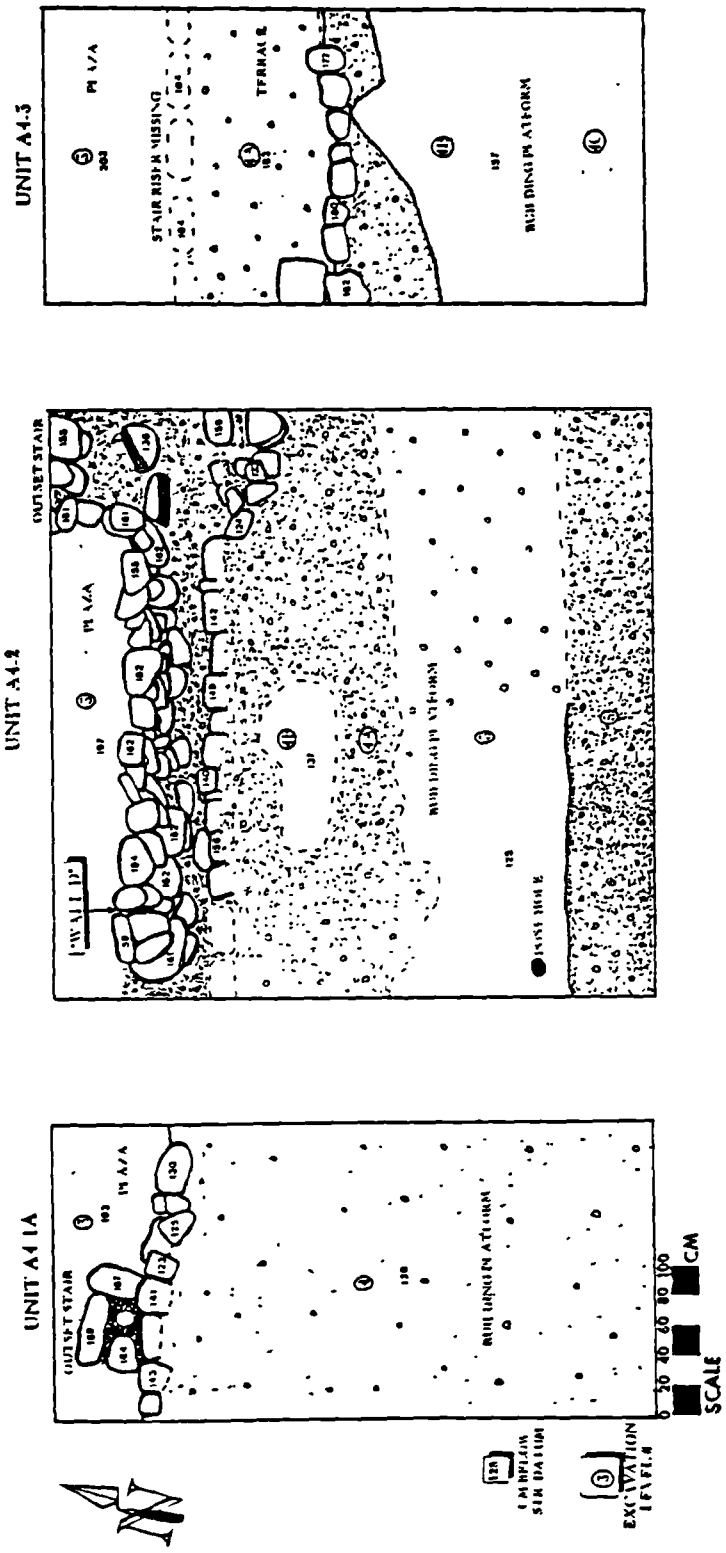


Figure 4.40. Top plan of A4-4th (spacing of units not to scale).

A4-3 (Levels 4A and 4C, Figure 4.25), and Unit A4-4a (Level 3, Figure 4.31a). Within Unit A4-2a the building platform was again extended northward, by elevating the previous A4-5th basal step to the building platform Level (Figure 4 40) The top of this new platform addition (Level 4B) was exposed at ca. 137 cm Below the Structure Datum, but given the poor preservation of the surface it is likely that the original elevation was closer to ca. 125 cm Below the Structure Datum. This addition functioned to increase the building platform living space by ca 60 cm, bringing the northern face of the platform in line with the stair riser of the previous A4-5th basal step. No post-holes attributable to this architecture were recognised, although it is highly likely that a pole-and-thatch or wattle-and-daub superstructure surmounted the A4-4th building platform. It is also likely that the bench originally constructed during A4-6th continued to be employed at this time.

The surface of the new addition consisted of a thin ca. 1-2 cm, poorly preserved remnant of the original plaster cap. Indications are that this cap was initially ca. 10 cm thick. This plastered surface overlay a 3-5 cm ballast layer of pebble (0.4-6.4 cm) composition, and a ca. 10-15 cm thick dry-stone core deposit. The latter fill deposit was loosely compact, and consisted primarily of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts. As a result of the A4-4th platform extension, and the complete burial of the previously employed stair feature, an outset stair had to be constructed in order to ascend to the enlarged building platform This feature (Level 3) was partially exposed in the northeastern corner of Unit A4-2 (Figure 4.41), and in the smaller Unit A4-5 extension. This new stair feature was in a poor state of preservation, however, it appears to have originally had three steps.

In conjunction with the addition of the outset stair, the *Ac* Courtyard surface was apparently replastered (Level 3). Although this floor was very poorly preserved, given its proximity to the surface, it was consistently recognised between 193-203 cm Below the Structure Datum in all excavation units. This ca. 13 thick replastering of the courtyard consisted of a ca. 1-2 cm thick plaster cap overlying a ca. 10 cm ballast layer. The latter was composed mainly of pebble (0.4-6.4 cm) sized clasts.

The A4-4th structural modifications in Unit A4-1a acted to raise the building platform level with that recognised in Unit A4-2. This activity therefore constituted an extension of the main building platform to the west. The new building platform surface was poorly preserved An extremely thin (ca. 1-2 cm) plaster cap was recognised across

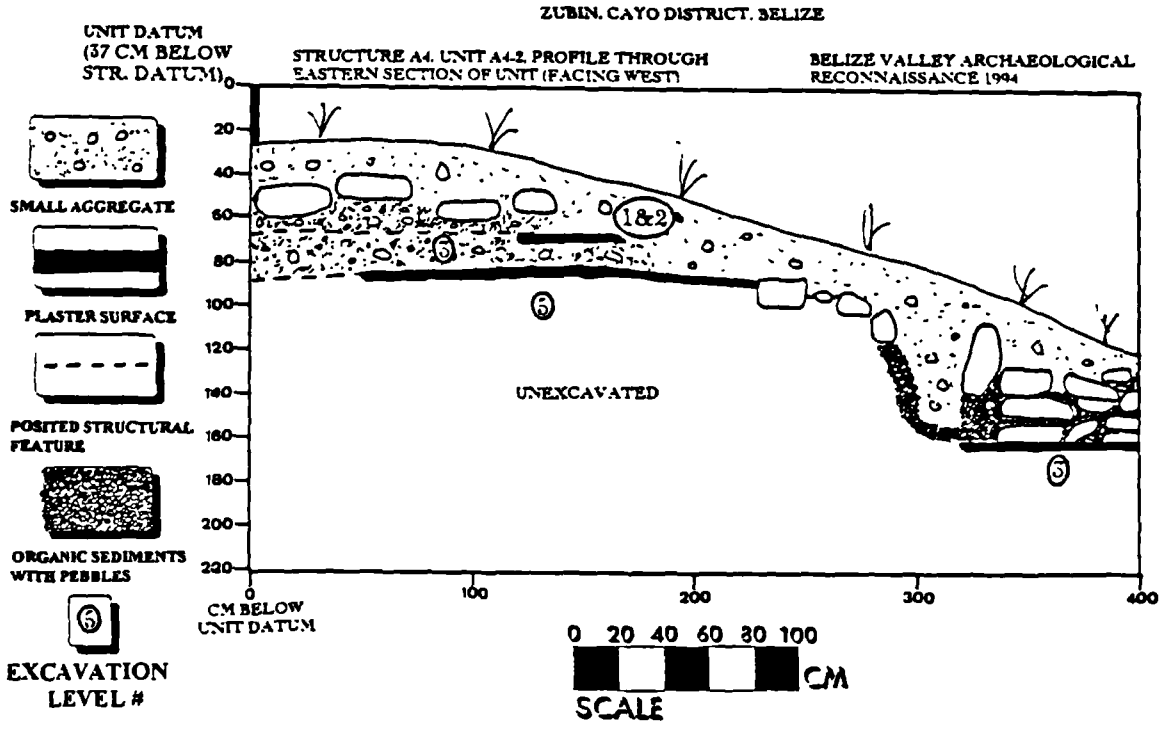


Figure 4.41. Post-excavation profile through the eastern section of Unit A4-2, facing west.

the unit at 128 cm Below the Structure Datum No post-holes were recognised within this surface, although it is likely that a pole-and-thatch or wattle-and-daub superstructure existed on the A4-4th building platform. Similarly, no evidence for a bench feature was found in Unit A4-1a in association with the A4-4th building platform. The thin plaster cap overlay a ca. 49 cm thick, moderately compact, fill deposit of small aggregate. The fill was composed of moderate percentages of pebble (0 4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts interspersed within a mortar matrix. The upper portion of this fill deposit was designated Level 4. Within this coarse fill a north/south, one course, "floating wall" was located (Level 5A). This may be a construction wall of some sort, as it was not associated with a prepared sustaining surface. The fill beneath this feature was removed as Level 5.

In association with the erection of the new A4-4th building platform, an outset stair (Level 3) was also constructed to facilitate access to the upper building platform. This step was of simple construction, consisting of three boulder (>25.6 cm) sized blocks arranged to encase a small amount of moderately compact, small aggregate fill. This latter deposit consisted of moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts within a mortar matrix. In combination with the erection of the new A4-4th building platform, and the construction of the outset stair, the *Ac* Courtyard floor was raised ca. 11 cm (Level 3). This floor was well preserved considering its proximity to the surface. The plaster cap, exposed at ca. 193 cm Below the Structure Datum, was ca. 4 cm thick, and was underlain by a ca. 6 cm thick ballast layer. The latter was composed primarily of pebble (0.4-6.4 cm) sized clasts.

Within Unit A4-3, the A4-4th structural modifications included the blocking off of the previously employed axis between the *Ac* and *Cutz* courtyards. This was achieved by filling in the stair leading to the *Cutz* Courtyard (Level 4C), bringing it level with the previous upper terrace. The surface of this addition was poorly preserved. The underlying ca. 50 cm thick fill deposit consisted of compact small aggregate, mainly moderate percentages of pebble (0.4-6.4 cm) and cobble (6 4-25 6 cm) sized clasts within a mortar matrix. This closing off of the southern access stair, and extension of the previous A4-5th terrace southward, effectively created the new A4-4th building platform. The surface of this feature was exposed at ca 157 cm Below the Structure Datum. This portion of the building platform was ca. 32 cm lower than that recognised across the rest of the structure The earlier A4-5th, north/south retaining wall, exposed

within Unit A4-6, continued to divide these two building platform levels No evidence for post-holes was discovered, although it is probable that a pole-and-thatch or wattle-and-daub superstructure was constructed upon the building platform.

To the north of the A4-4th building platform a new terrace step was constructed. The poorly preserved tread, having been elevated ca. 15 cm above its previous A4-5th level, was exposed at ca. 183 cm Below the Structure Datum. The remnant plaster cap was only ca. 1-2 cm thick. This overlay a ca. 12 cm ballast layer, composed of loosely compact, pebble (0.4-6.4 cm) sized clasts. In conjunction with the raising of this feature, the terrace step was extended ca. 30 cm to the north, where a ca. 20 cm high riser led down to the new *Ac* Courtyard surface at ca. 203 cm Below the Structure Datum. This ca. 6 cm thick replastering of the courtyard surface was achieved by laying down a ca. 3 cm ballast layer, composed primarily of pebble (0.4-6.4 cm) sized clasts, and a ca. 3 cm plaster cap.

Lithic debitage was recovered in moderate percentages from the A4-4th fill deposits. Faunal remains were less prevalent. Significant artefacts recovered from this construction level included: a carved, limestone spindle whorl (A4-SF/24), and seven medial sections of obsidian blades (A4-SF/25, A4-SF/26, A4-SF/27, A4-SF/28, A4-SF/29, A4-SF/30, A4-SF/70), from the upper building platform fill within Unit A4-1a (Level 4); three medial sections of obsidian blades (A4-SF/31, A4-SF/34, A4-SF/36), two proximal sections of obsidian blades (A4-SF/33, A4-SF/35), a ceramic sherd bead (A4-SF/32), a basalt mano fragment (A4-SF/55), a granite metate fragment (A4-SF/74, Figure 4.39b), a utilised chert flake (A4-SF/76), and a chert biface fragment (A4-SF/77), from the basal building platform fill within Unit A4-1a (Level 5), a proximal section of obsidian blade (A4-SF/3), from the terrace step fill in Unit A4-3 (Level 4A), and a medial section of obsidian blade (A4-SF/22) from the outset stair fill in Unit A4-5. The ceramic sample was of moderate size, and was dominated by Xnipek (600-675 A.D.) and Maxik phase (675-875 A D) varieties. The most prominent Xnipek phase varieties were Sotero Red-Brown: Sotero Variety, and Zibal Unslipped: Varieties Unspecified. The most prevalent Maxik phase varieties were Alexander's Unslipped: Alexander's Variety, Cayo Unslipped: Cayo Variety, Belize Red Belize Variety, Dolphin Head Red. Dolphin Head Variety, Chunhuitz Orange: Chunhuitz Variety, and Mount Maloney Black· Mount Maloney Variety. This assemblage, considered in combination with the dates for the preceding and following construction phases, suggests a date of 675-750 A D. for the

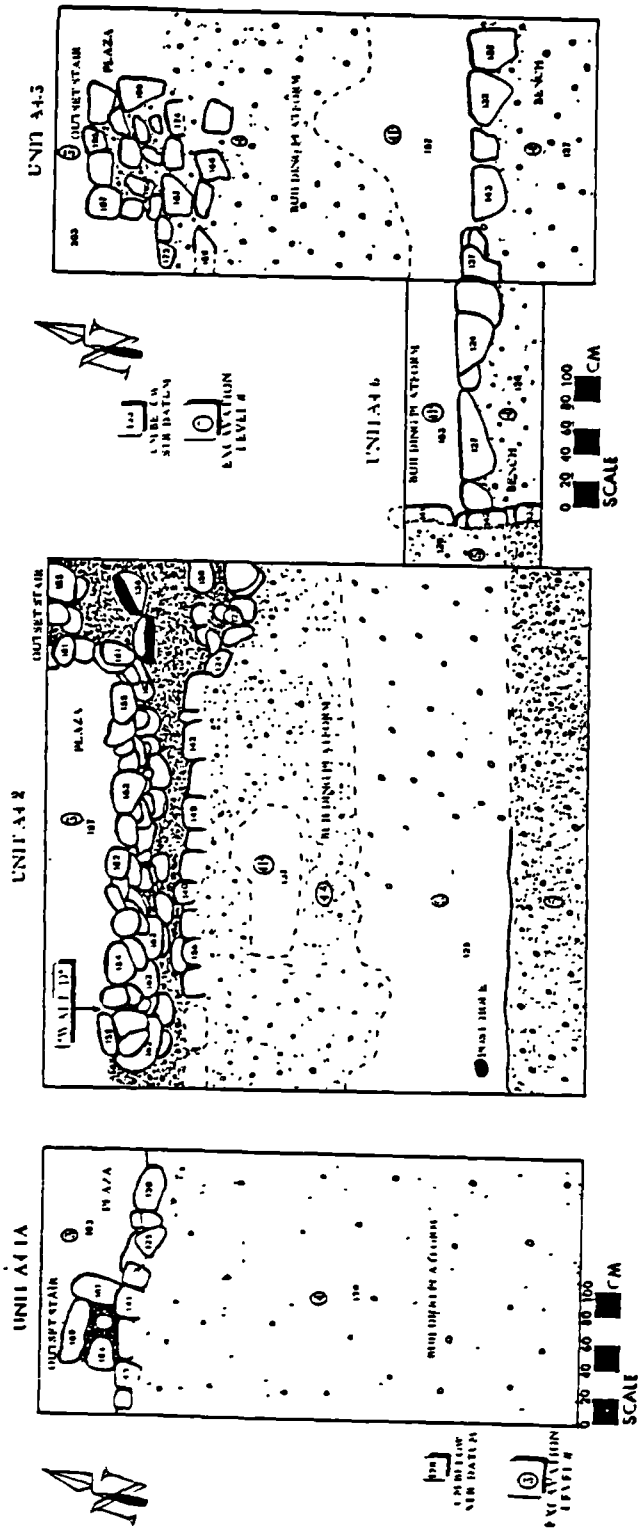


Figure 4.42. Top plan of A4-3rd (spacing of units not to scale).

A4-4th structural modifications. One cache (*A4-F 1*) was encountered during excavation of A4-4th (see Chapter 5).

A4-3rd. A4-3rd, the next construction phase, represents minor alterations to the building platform in Units A4-3 and A4-6 (see Figure 4.42) . The remainder of the structure continued to be utilised in unaltered form. Within A4-3 the previous A4-4th building platform was extended northward ca. 120 cm (see Figure 4.25). This was achieved by raising the old terrace step area by ca. 25-26 cm in order to bring it in line with the front retaining wall for the rest of the A4 architecture, and with the original A4-4th building platform surface at ca. 157 cm Below the Structure Datum. The surface of the A4-3rd building platform extension was poorly preserved, only a thin (1-2 cm) plaster cap remained. This overlay a 2-3 cm ballast deposit, and a ca. 20 cm thick fill deposit (Level 4) of small aggregate. This matrix was composed of moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts interspersed within a mortar matrix.

A4-3rd also saw the addition of a long, low, east/west bench to this locus. This bench feature exhibited a ca. 30 cm high, two course retaining wall. The original plaster bench surface was completely deteriorated. The top of the bench fill (Level 4), which consisted of highly compact, small aggregate, was exposed within Units A4-3 and A4-6 at ca. 126-127 cm Below the Structure Datum. This low bench spanned both the A4-3 and A4-6 units (see Figures 4.25, 4.31b). To the west the bench abutted the north/south retaining wall for the higher A4-4th building platform in Unit A4-2. The top of the bench coincided with the surface of this higher building platform area. Again, no evidence for post-holes was uncovered, although it is felt that a pole-and-thatch or wattle-and-daub superstructure surmounted the building platform.

In conjunction with the bench addition, and building platform extension, a one step outset stair was constructed. The tread of this feature was exposed at ca. 192 cm Below the Structure Datum, ca. 35 cm below the building platform surface. The fill of this tread consisted of two courses of thin (ca. 5 cm), cobble (15-20 cm) sized limestone slabs. The plaster cap was completely deteriorated. This step ran ca. 30 cm to the north, where it terminated at a ca. 11 cm high, one course riser. This in turn led down to the *Ac* Courtyard surface at ca. 203 cm Below the Structure Datum. In combination, these features significantly altered the eastern portion of the building platform, bringing it more in accord with the rest of the contemporaneous A4 architecture.

Lithic debitage was recovered in moderate percentages from the A4-3rd fill. Faunal remains were relatively rare. Significant artefacts recovered from the A4-3rd construction fill (Level 4) included a medial section of obsidian blade (A4-SF/4), an exhausted chert biface fragment (A4-SF/93), a chert scraper (A4-SF/94), a thin chert biface fragment (A4-SF/138), and two granite metate fragments (A4-SF/139, A4-SF/142). An "on-floor" assemblage of artefacts was also recovered from the surface of the A4-3rd building platform in Unit A4-3 (Level 4). This assemblage was composed of a two granite mano fragments (A4-SF/112, A4-SF/115), two chert biface fragments (A4-SF/113, A4-SF/114), and a limestone "pestle" (A4-SF/116). The ceramic assemblage was small, given the limited nature of the A4-3rd additions. The sample was dominated by Xnipek (600-675 A D.) and Maxik phase (675-875 A.D.). The most prevalent Xnipek phase varieties were Zibal Unslipped: Varieties Unspecified, and Sotero Red-Brown: Sotero Variety. Prominent Maxik phase varieties were Dolphin Head Red: Dolphin Head Variety, Alexander's Unslipped: Alexander's Variety, Cayo Unslipped: Cayo Variety, Belize Red: Belize Variety, Chunhuitz Orange: Chunhuitz Variety, and Mount Maloney Black: Mount Maloney Variety. This assemblage, considered in conjunction with the ceramic samples obtained from the architecture immediately preceding and following this construction phase, indicates a date of 675-750 A.D. for the A4-34th structural additions.

A4-2nd. A4-2nd, the penultimate A4 construction phase (Figure 4.43), was recognised in Units A4-1 (Levels 3F, 3E, 3D, 3G, Figure 4.24), A4-2 (Level 3, Figure 4.22), A4-3 (Level 3, Figure 4.25), A4-4 (Level 3, Figure 4.31a), and A4-6 (Level 3, Figure 4.31b). It is with this construction phase that the western section of the architecture (A4-1) begins to exhibit features indicative of more substantial labour investment, in comparison to the rest of the structure Within Unit A4-1 the building platform was elevated ca. 23 above its previous A4-3rd elevation. The surface of this new building platform (Level 3E), exposed at ca. 105 cm Below the Structure Datum, functioned as an interior room space enclosed by double-faced, masonry walls This floor was fairly well preserved, consisting of a ca. 6-8 cm thick plaster cap, a ca. 4 cm ballast layer (mainly pebble [0.4-6.4 cm] sized clasts), and a ca. 14 cm thick basal fill deposit of moderately compact small aggregate (primarily pebble [0 4-6.4 cm] and cobble [6.4-25.6 cm] sized clasts).

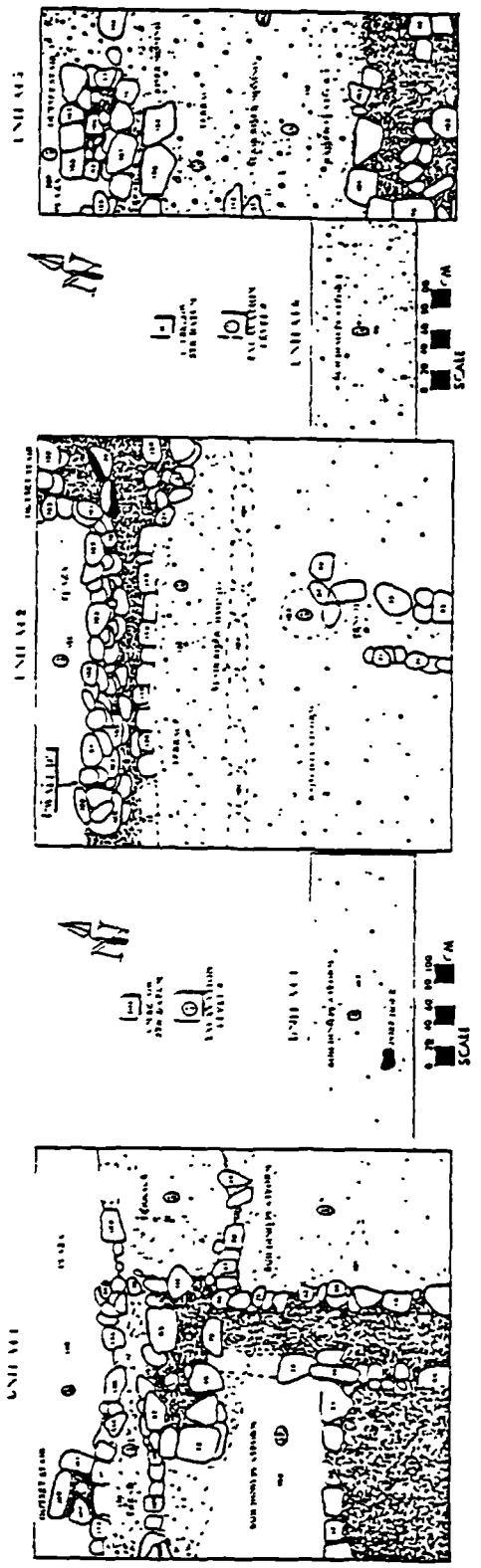


Figure 4.43. Top plan of A4-2nd.

The southern boundary of the room was dominated by a large bench. This feature was not completely revealed by Unit A4-1, but indications are that it was ca. 61 cm high, at least 120 cm wide, and substantially longer than the 180 cm section exposed during excavations. The bench surface, encountered at ca. 44 cm Below the Structure Datum, was completely deteriorated Its original height was suggested by the presence of a compact aggregate core deposit. This bench fill (Level 3F), being ca 84 cm thick, consisted of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts within a mortar matrix.

The eastern extent of the interior room was bounded by a ca. 60 cm high, ca. 90 cm wide, double-faced masonry wall (Level 3D). This north/south oriented wall, exposed at ca. 45 cm Below the Structure Datum, was three courses high, each course averaging 20 cm in thickness. The wall top was completely deteriorated, but indications are that it was originally consistent with the elevation of the bench surface (ca. 44 cm Below the Structure Datum). The fill deposit that formed the wall body consisted of compact small aggregate, mainly pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts within a mortar matrix.

To the south this wall abutted the bench facing wall. To the north, ca. 90 from the bench face, a second double-faced masonry wall was encountered (Level 3G). This east/west oriented wall was ca. 80 cm wide, ca. 180 cm long, and ca. 32 cm high. This wall defined the northern extent of the room, and it is likely that it was originally identical in height to the north/south wall (Level 3D) and the bench (Level 3F). However, the upper course of this three course wall had been displaced over time, leaving only the basal two courses. These were exposed at ca. 73-79 cm Below the Structure Datum. The wall body was composed of compact small aggregate, primarily pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts interspersed throughout a mortar matrix. This wall ran ca. 90 cm to the west (from the inside face of the eastern wall) where an entrance to the room was discovered. At this juncture the front face of this northern wall was aligned with a ca. 23 cm high stair riser, which lead to a stair tread at ca. 137 cm Below the Structure Datum The former A4-3rd building platform surface (Level 4) was employed to form this step. This tread was ca 50 cm deep, and ran the entire length of the room, at the base of the building's front wall (Level 3G). At the entrance this tread terminated at the nose of a ca. 30 cm high stair riser (previously the A4-3rd building platform retaining wall). This led down to the previous A4-3rd outset

stair (Level 3) at ca 164 cm Below the Structure Datum, and in turn to the contemporaneous *Ac* (Level 4) Courtyard surface at ca. 190 cm Below the Structure Datum

No evidence for post-holes was found within the Unit A4-1 excavations. However, post-holes were found in other units, indicating that A4-2nd was surmounted by a wattle-and-daub or pole-and-thatch superstructure. Within the western portion of the structure it is plausible that the uprights were positioned within the wall body, thus making them difficult to isolate during excavations. It seems likely that, at least in the western portion of Structure A4, the A4-2nd building exhibited a pole-and-thatch or wattle-and-daub superstructure with partial masonry walls.

Within the remainder of the structure significant, albeit less elaborate modifications, were undertaken during the A4-2nd construction phase. The upper building platform was raised ca. 23-24 cm in Units A4-2, A4-4 and the eastern portion of Unit A4-1, and ca 50 cm in Units A4-3 and A4-6 (Level 3). The fill employed during this elevational increase was consistently small aggregate of moderate compaction. Pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts were present in high percentages within the mortar matrix The upper building platform retaining wall was concomitantly increased through the addition of two or three course levels. These additions effectively brought the building platform level with that already described for the A4-1 locus (ca. 101-105 cm Below the Structure Datum).

As with Unit A4-1, the previous A4-3rd building platform was employed as a step which fronted the building proper at ca. 137 cm Below the Structure Datum. However, unlike in Unit A4-1, this feature was much wider in depth, being ca. 140 cm deep, and thus is best classified as a terrace rather than a step. In general, the building platform was poorly preserved, except for a small section exposed in the eastern portion of Unit A4-1 (at ca. 101 cm Below the Structure Datum). The superior preservation of this section of the floor was undoubtedly due to its proximity to the masonry wall. Evidence for bench features was found in association with the A4-2nd floor in Units A4-2 and A4-3 (see Figure 4 43) These bench remnants where in exceedingly poor states of preservation, thus it is impossible to characterise them with any certainty.

Within Unit A4-4 a ca 22 cm wide, ca. 40 cm deep post-hole was discovered. A similarly positioned post-hole was previously uncovered during excavation of the A4-6th building platform (this portion of the platform was employed during A4-6 thru A4-3rd).

This post-hole was clearly intrusive into this level (see Figure 4 22), implying that it was dug during the A4-2nd construction phase. Unfortunately, the surface of this later building platform was too poorly preserved to permit recognition of the upper portion of the post-hole during excavations. Still, although this post-hole was shallower than the one isolated within Unit 4-4 (ca. 28 cm vs. 40 cm), its spatial location suggests that the two are related. These features reaffirm the notion that a simple pole-and-thatch or wattle-and-daub superstructure surmounted the A4-2nd building platform The main difference between this segment of the A4-2nd structure, and the extreme western portion of the building, was the use of double-faced masonry walls in the latter.

Lithic debitage was recovered in moderate percentages with the A4-2nd fill deposits. Faunal remains were rare throughout. Significant finds included a chert scraper (A4-SF/108), and a quartz massive mano fragment (A4-SF/109), from the bench fill in Unit A4-1a (Level 3F), two medial sections of obsidian blades (A4-SF/15, A4-SF/20), and an olive shell "tinkler" (A4-SF/40, Figure 4.28f), from the building platform fill in Unit A4-2 (Level 3), a proximal section of obsidian blade (A4-SF/7), from the building platform fill in Unit A4-3 (Level 3), and an olive shell "tinkler" (A4-SF/39, Figure 4.28g), a modified slate fragment (A4-SF/83), a chert biface fragment (A4-SF/131), and two utilised chert flakes (A4-SF/132, A4-SF/133), from the building platform fill in Unit A4-6 (Level 3). The ceramic sample was large, and was dominated by Xnipek (600-675 A.D), and Maxik (675-875 A.D.) phase varieties. Dominant Xnipek phase varieties included Sotero Red-Brown: Sotero Variety, and Zibal Unslipped: Varieties Unspecified. The most prominent Maxik phase varieties were Belize Red: Belize Variety, Chunhuitz Orange: Variety Unspecified, Dolphin Head Red: Dolphin Head Variety, Cayo Unslipped: Cayo Variety, and Mount Maloney Black: Mount Maloney Variety This assemblage, exhibiting large percentages of Xnipek/Maxik phase transitional varieties (e g Sotero Red Brown: Sotero Variety), and early facet Maxik phase varieties (e g. Dolphin Head Red: Dolphin Head Variety), and limited numbers of late facet Maxik phase varieties (e g. Mount Maloney Black: Mount Maloney Variety), suggests a date of 675-750 A.D. for the construction of A4-2nd.

A4-1st. A4-1st, the last construction phase identified at the A4 locus, constituted a series of minor modifications to the western portion of the structure (Figure 4.44) These additions were exposed within Units A4-1 (Levels 3A, 3B, 3C, Figure 4.22), and A4-4 (3C, Figure 4.31a) Within Unit A4-1 the western room floor was resurfaced

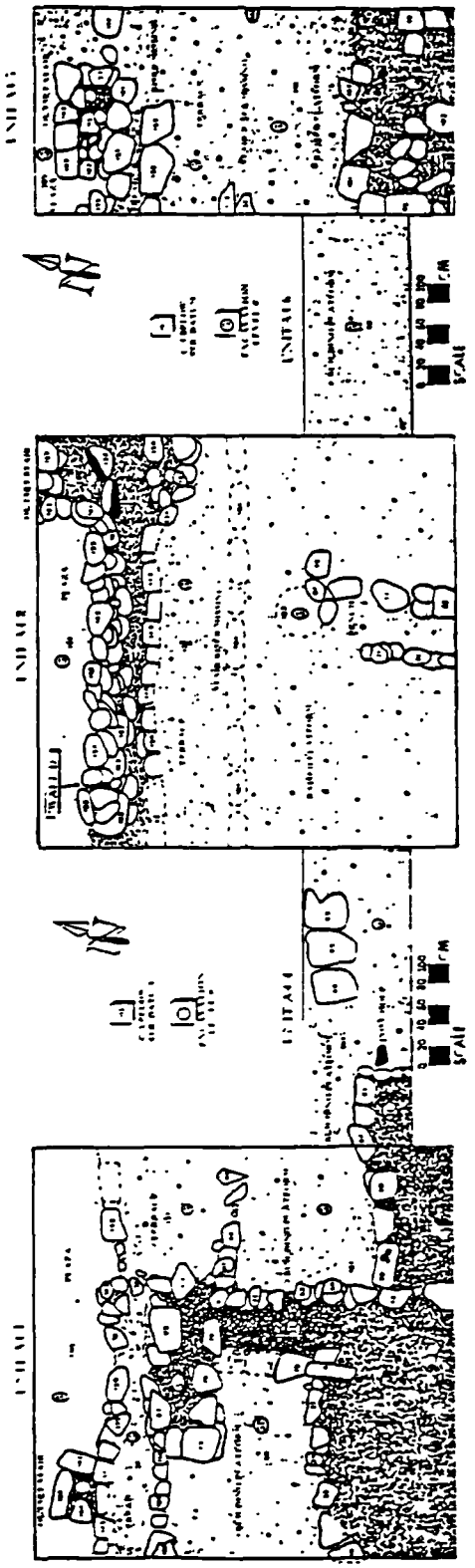


Figure 4 44. Top plan of A4-1st.

(Level 3B). This new floor surface was elevated at least ca. 25 cm above its previous A4-2nd height. The surface of this floor was completely deteriorated. Its original height was suggested by the presence of a fill deposit of moderately compact small aggregate, exposed at ca. 80 cm Below the Structure Datum. This consisted primarily of moderate percentages of pebble (0 4-6 4 cm) and cobble (6 4-25.6 c,) sized clasts within a mortar matrix

In conjunction with the raising of the interior floor, the bench feature was also increased in height. Due to its proximity to the surface, its plaster cap had been entirely destroyed. The bench fill (Level 3A), a loosely compact small aggregate deposit, was exposed at ca. 30 cm Below the Structure Datum. Evidently, the surface of the A4-1st bench was originally higher than this, as was reaffirmed by the exposure of some bench retaining wall stones at ca. 18 cm Below the Structure Datum. Thus the new bench surface was probably elevated between 14 and 26 cm above its previous A4-2nd height. A more accurate measurement cannot be provided given the deterioration of the surface architecture.

The only other structural modification attributable to A4-1st was the addition of a new, smaller, bench (Level 3C), which was erected in the room immediately to the east of the one just discussed. This bench, exposed within Unit A4-1 and A4-4, was ca. 215 cm long and at least 100 cm wide. This feature was sustained by the earlier A4-2nd building platform floor, at ca. 101 cm Below the Structure Datum. It abutted the A4-2nd north/south double faced masonry wall (Level 3D) on the west, and terminated at the intersection with a post-hole, also attributable to A4-2nd, on the east. Preservation of this feature ranged from good to excellent within Unit A4-1, to extremely poor in Unit A4-4. Within Unit A4-1 a small portion of plaster, indicative of the bench surface, was exposed at ca. 55 cm Below the Structure Datum. This implied that the bench was originally 46 cm high. The bench facing wall was of three course construction. Within Unit A4-4 only the basal course remained, the upper courses having been displaced through natural and/or cultural transformation processes. The bench fill consisted of moderate to highly compact, small aggregate. Pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts were present in moderate to high numbers within the mortar matrix. The remainder of the A4-2nd architecture appears to have been employed in unaltered form with these new A4-1st additions. The presence of

post-holes suggests that the A4-1st superstructure continued to be of pole-and-thatch or wattle-and-daub construction.

Lithic debitage and faunal remains were recovered in small to moderate numbers from the A4-1st fill, undoubtedly a reflection of the limited extent of these alterations. The only significant artefacts were a chert biface (A4-SF/91), and a chert biface preform (A4-SF/92), both encountered during excavation of the western room floor fill (Level 3B). The ceramic sample was similarly small, and highly weathered in some contexts (e.g. the Level 3A upper bench). The assemblage was dominated by Xnipek (600-675 A.D.) and Maxik (675-875 A D.) varieties. Prominent Xnipek phase varieties included Sotero Red-Brown: Sotero Variety, and Zibal Unslipped: Varieties Unspecified. The most prevalent Maxik phase varieties were Belize Red: Belize Variety, Chunhuitz Orange: Variety Unspecified, Dolphin Head Red: Dolphin Head Variety, Cayo Unslipped: Cayo Variety, and Mount Maloney Black: Mount Maloney Variety. As this sample contains large percentages of Xnipek/Maxik phase transitional varieties (e.g. Sotero Red Brown: Sotero Variety), early facet Maxik phase varieties (e.g. Dolphin Head Red: Dolphin Head Variety), and limited numbers of late facet Maxik phase varieties (e.g. Mount Maloney Black: Mount Maloney Variety), a date of 675-750 A.D. is likely for the addition of the new A4-1st features.

Level 2. Level 2, a fall deposit of variable thickness, was excavated across the structure (see Figures 4.22, 4.24, 4.25, 4.31a, 4.31b). This deposit consisted primarily of loosely compacted structural components which had been displaced by natural processes. The ceramic sample from this deposit, dating to the Maxik phase (675-875 A.D.) was highly weathered, and of mixed origin. Lithic debitage and faunal remains were recovered in small to moderate percentages. Significant finds derived from this matrix included a proximal section of obsidian blade (A4-SF/10), a granite mano fragment (A4-SF/130, Figure 4.45a), a quartzite hammerstone (A4-SF/141), and a limestone spindle whorl (A4-SF/11), from the fall deposit north of the southwest room in Unit A4-1 (Level 2A), a granite metate fragment (A4-SF/106, Figure 4 45b), and a chert scraper (A4-SF/107), from the fall deposit associated within the southeastern room and associated bench in Unit A4-1 (Level 2C), and a medial section of obsidian blade (A4-SF 2), a drilled sherd (A4-SF/5), a granite mano fragment (A4-SF/80), a chert biface fragment (A4-SF/96), a granite metate fragment (A4-SF/81), and a chert drill (A4-SF/82), from the fall deposit in Unit A4-3. Due to the generally poor preservation

Figure 4.45. Granite mano fragments from the Structure A4 fall deposit (Level 2) (a) A4-SF/130; (b) A4-SF/106 (drawings by Tina Christensen and Gyles Iannone).

of the A4-1st and A4-2nd architecture, it was difficult in some instances to separate the fall deposit from the underlying terminal architecture. This meant that some artefacts were recovered from a matrix composed of a "mix" of the two deposits. These artefacts include a ceramic whistle? (A4-SF/6), a medial section of obsidian blade (A4-SF/12), and a chert grinding/polishing stone (A4-SF/88), from Unit A4-2a (Level 2 and 3 mix).

Level 1. Level 1, a surface/humus deposit, was comprised of loose to moderately compact, organic rich sediments. This matrix varied in thickness, and contained numerous roots and rootlets. The deposit formed through the general processes of soil formation, as a result of the stabilisation of the underlying fall deposit. Ceramics generally dated to the Maxik phase (675-875 A.D.). Lithic debitage and faunal remains were encountered in small to moderate numbers. A fragment of a plaster briquette was recovered from this deposit during excavations in Unit A4-2. This find reaffirms the postulation that Structure A4 was surmounted by a wattle-and-daub superstructure.

Significant artefacts recovered from the surface/humus deposit included a medial section of obsidian blade (A4-SF/8), a limestone bead (A4-SF/9), and a unifacial chert chopper (A4-SF/86), from Unit A4-1 (Level 1), a conch shell adorno (A4-SF/13, Figure 4.23a), two medial sections of obsidian blades (A4-SF/14, A4-SF/17), a bifacial chert chopper (A4-SF/98), a granite metate fragment (A4-SF/99, Figure 4.46a), two chert biface fragments (A4-SF/100, A4-SF/105), a utilised chert flake (A4-SF/103), a granite mano fragment (A4-SF/120), a quartz massive mano fragment (A4-SF/121), and a chert drill (A4-SF/122), from Unit A4-2 (Level 1), a carved section of freshwater clam (A4-SF/1, Figure 4.23c), and a chert drill (A4-SF/144), from Unit A4-3 (Level 1), a granite mano (A4-SF/117, Figure 4.46b), a chert biface fragment (A4-SF/118), and a bifacial chert chopper (A4-SF/119), from Unit A4-4 (Level 1), and a basalt scraper/knife (A4-SF/89), from Unit A4-5 (Level 1). As with the previously discussed fall deposit (Level 2), excavators sometimes found it difficult to separate the surface/humus deposit (Level 1) from the underlying fall (Level 2) and terminal architecture (Level 3). This was due to the poor preservation of the latter deposit, and the consistent interfingering of all three deposits. Artefacts recovered from this mixed matrix included three medial sections of obsidian blades (A4-SF/16, A4-SF/18, A4-SF/19), a chert biface preform (A4-SF/87), two chert biface fragments (A4-SF/102, A4-SF/126), a quartz massive mano fragment (A4-SF/127), a chert drill/graver (A4-SF/128), and a chert scraper (A4-SF/129), from Unit A4-2 (Level 1-3 mix). Finally, during initial surface

Figure 4 46. Groundstone artefacts from the Structure A4 surface/humus deposit (Level 1): (a) granite metate fragment (A4-SF/99); (b) granite mano fragment (A4-SF/117; drawings by Tina Christensen and Gyles Iannone).

reconnaissance of the A4 mound a medial section of obsidian blade (A4-SF/61), a granite metate fragment (A4-SF/85), and a ceramic figurine head (A4-SF/45) were collected.

In summary, Structure A4 is a likely candidate for the primary Zubin residence. This interpretation is suggested by the structure's morphology and relative size, as well as the presence of special features such as benches, and the prominence of utilitarian artefacts within the fill. However, it should be emphasised that this residential function manifested itself rather late at the A4 locus. Although construction at this location was initiated during the Late Formative period, it remained a secondary activity area until the Late Classic period. It was not until this time that this locus began to be the site of residential construction. This fits the general pattern for this time period, whereby it is only with the Late Classic that residential construction appears within the Zubin site core and periphery. Over time A4's inhabitable space is expanded to the east, west, and north. However, in conjunction with this expansion there appears to have been an overt effort to maintain the original size of the main *Ac* Courtyard. When there was a need to expand the size of the living space to the north, this was achieved by covering steps and adding outset stairs, rather than by extending the entire building platform. In conjunction with the enlargement of interior living space, a trend attributable to the natural developmental cycle of an extended family, there was also increasing differentiation between the various portions of the building with reference to the quality of architecture. For instance, the central portion of the structure was the locus of the first building platform, and continued to be higher in elevation than the rest of the mound for the much of the early occupation of the mound. However, during the late occupation the western portion of the mound takes over as the most important, as is indicated by the construction of the larger bench and double-faced masonry walls These differences are suggestive of significant status, wealth, and power differences within the primary family itself.

The artefact assemblage recovered from A4 was rather mundane, which reaffirms the residential interpretation for the mound. This postulation is similarly backed up by the paucity of ritual deposits. No burials were discovered, which undoubtedly reflects the close proximity to the A1 ancestor shrine, this latter structure obviously the main focus for such activity. Concomitantly, virtually no cache deposits were encountered, with the exception of a handful of partial vessel, termination/dedication caches.

EXCAVATIONS IN THE *BAC-HA* COURTYARD

Courtyard B or *Bac-ha* (white crane), the northern group of mounds in the site core (see Figure 3.5), consists of highly restricted arrangement of architectural features. These features include an unvaulted range-type structure on the west (B8), a low-lying mound on the north (B7), and a special purpose building on the east (B6). The *Bac-ha* Courtyard is substantially lower in elevation than the *Ac* Courtyard, its surface being over 2.25 m below its counterpart in *Ac*. "Formal" entrance into the *Bac-ha* Courtyard was gained by way of a central staircase located at the boundary of the two courtyards. Further access between the two courtyards was achieved via what appears to be a small set of steps located adjacent to B6-1st and the *Ac* Courtyard retaining wall. In no way can this latter stair be considered a "formal" entrance. A large quarry area is situated immediately north of the courtyard. This feature further inhibited entrance into the *Bac-Ha* Courtyard at that point.

Bac-ha Courtyard Operation: Unit A2-1

Unit A2-1, a 2x2 m excavation, was excavated at the junction of the *Ac* and *Bac-ha* courtyards (see Figures 4.2). The purpose of this unit was twofold. First, it was to provide data pertaining to the method and temporal sequence of *Bac-ha* Courtyard construction. Second, it was placed in a location were it was thought that the western section of the stairway between the two courtyards might be exposed.

Level 4. Level 4, the initial construction at Unit A2-1 locus, was a well preserved plaster floor (Floor II; see Figures 4.47 and 4.48). This floor constituted the penultimate courtyard surface. The level was ca. 15-20 cm thick in total. The well preserved plaster surface was ca 10-12 cm thick. Underlying this cap was a ca 6-8 cm ballast layer, composed mainly of pebble sized (0.4-6.4 cm) clasts and finer sediments. A few cut-stone boulders (> 25 6 cm), representing a fall deposit, were exposed in the south-central portion of the unit These lay slightly above the actual floor surface, indicating that they were deposited after the termination of Floor II use. A one course perimeter wall was also encountered (see Figure 4 48). This wall, comprised of boulder sized (> 25.6 cm) cut-stones, ran roughly east-west. It was situated approximately in the centre of the unit. The stones making up this wall lay directly on the Floor II surface,

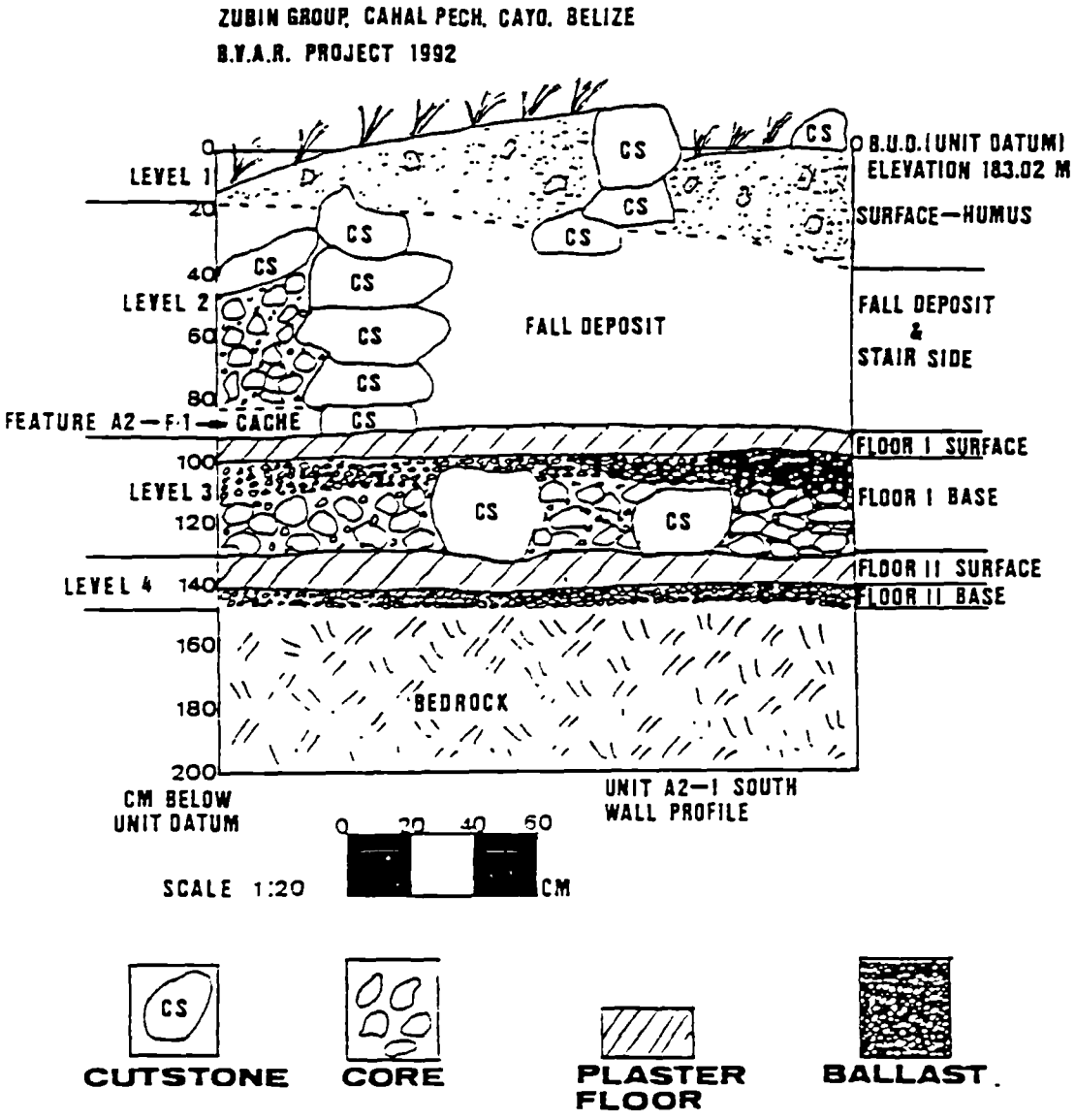


Figure 4 47. Post-excavation profile of Unit A2-1, facing south.

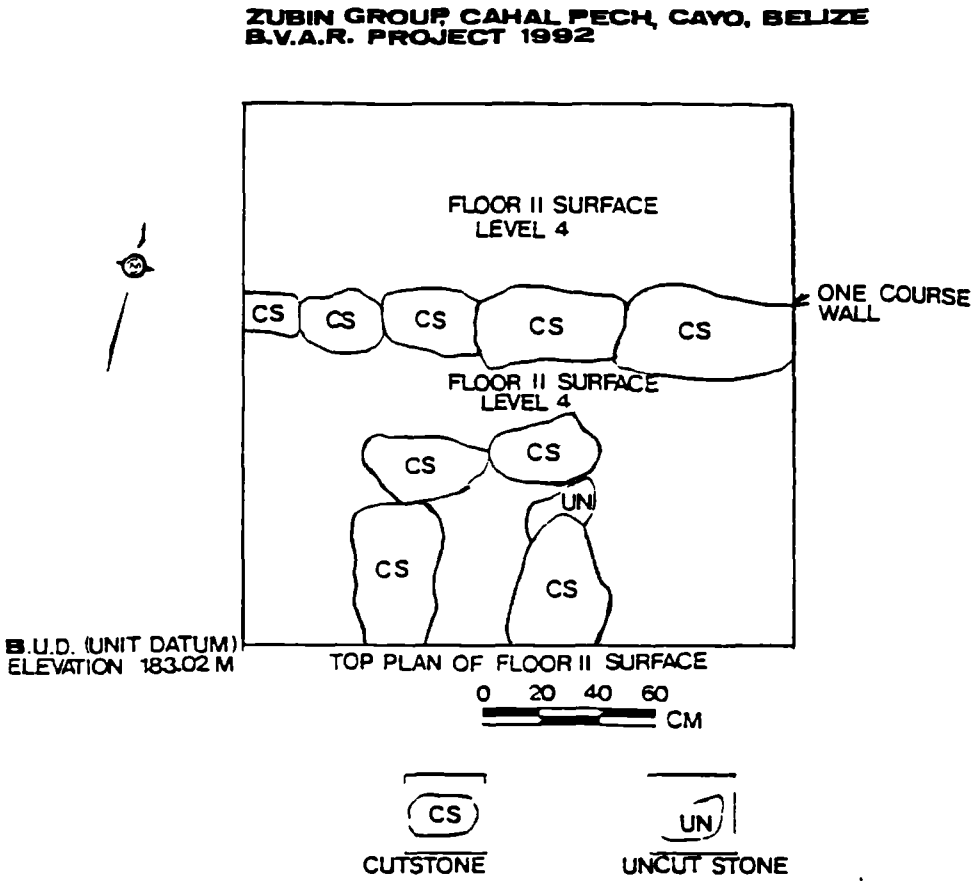


Figure 4.48. Top plan of Level 4, Floor II, Unit A2-1.

indicating that they were in use during the Floor II occupation. A similar wall was found on this surface during excavations in the courtyard adjacent to Structure B8 (see below). Beneath the Floor II ballast layer, at ca. 145-150 cm Below Unit Datum, moderate to hard limestone bedrock was discovered.

Finds from this floor level included ceramics, lithics, and freshwater shell. A limestone awl or chisel (A2-SF/13) was the only formal tool recovered. Only a limited ceramic sample was obtained from this level, in which the Kanluk Ceramic Complex (900-350 B.C.), Sayab Daub-Striated, and early facet Xakal phase (350 B C.-100 A.D.), Sierra Red Groups dominated. Further excavation of this floor level within the courtyard adjacent to Structure B8 (see below), in which a much larger ceramic sample was obtained, produced an assemblage in which all types were representative of the Kanluk Ceramic Complex. This data, combined with the A1-2 assemblage, suggests a late facet Kanluk phase date of 650-350 B.C. for this initial courtyard construction. This surface continued to be employed, without major modification, into the Late Classic Maxik phase.

Level 3. Level 3 constituted the terminal *Bac-ha* Courtyard floor. Floor I, a ca. 35-40 cm construction level, included a ca. 8-10 cm plaster surface, underlain by a ca. 10-15 cm ballast layer, and a ca. 15-20 cm core deposit (see Figure 4.47 and 4.49). The Floor I plaster surface was poorly preserved except for in the southeast corner, where it had been partially protected by the subsequent addition of a stair during the Level 2 construction phase (see below). The ballast layer consisted mainly of pebble sized (0.4-6.4 cm) clasts interspersed with fine grey-brown sediments. Cobble sized (6.4-25.6 cm) materials dominated the core deposit, although moderate percentages of pebble sized (0.4-6.4 cm) clasts were also present.

Ceramics, freshwater shell, and lithic debitage were recovered in moderate to high percentages A chert biface fragment (A2-SF/6), a bifacially flaked chert "chopper" (A2-SF/7), and a chert hammerstone (A2-SF/14) were also recovered from this level. Ceramics were predominantly from the Maxik phase (675-875 A.D.). Dominant types included those of the Belize, Dolphin Head, and Mount Maloney Ceramic Groups, indicating that a date of 750-875 A.D. is likely for Floor I construction.

Level 2. Level 2 included both a substantial fall deposit and a poorly preserved stairside (see Figures 4 47 and 4.50), the latter representing the western end of the terminal access stair joining the *Ac* and *Bac-ha* courtyards. The courtyard floor

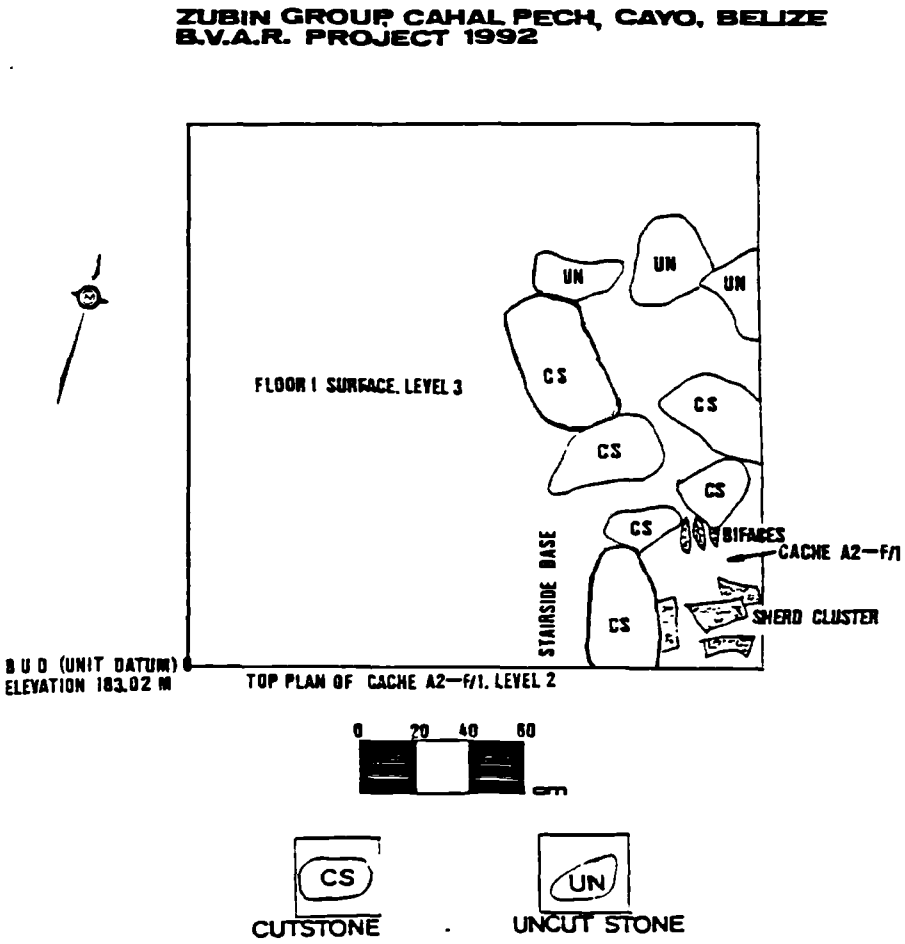


Figure 4.49. Top plan of Level 3, Floor I, Unit A2-1.

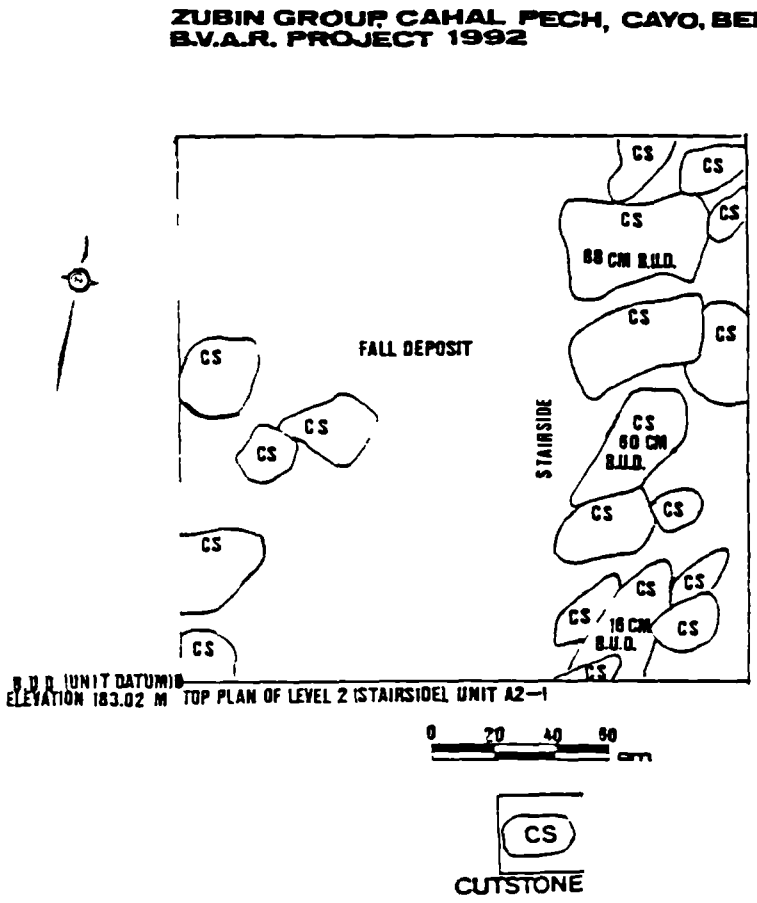


Figure 4.50. Top plan of the Level 2 stairside, Unit A2-1

constructed during Level 3 (Floor I, see above), continued to be employed as the sustaining surface for the new stair. Level 2 varied in thickness from ca. 8-74 cm, depending on location in the unit The fall deposit, mainly present in the western portion of the unit, was predominantly comprised of boulder sized cut-stones (> 25 6 cm) interspersed with moderate percentages of cobble (6.4-25.6 cm) and pebble (0.4-6.4 cm) sized clasts. The poorly preserved stairside, situated near the eastern boundary of the unit (see Figure 4.50), consisted of a series of stacked, boulder sized (> 25.6 cm) cut-stones. This stairside was five courses high in the south, where it abutted a retaining wall, the latter not having been not fully exposed by the excavations. From this point the stairs sloped downward toward the courtyard surface to the north (Level 3, Floor I) The stair face was underlain by backing masonry which included mainly cobble (0.4-6.4 cm) and pebble (0.4-6.4 cm) sized clasts, interspersed with finer sediments.

Few ceramics or lithics were recovered from the level However, a notched chert flake (A2-SF/8), a chert biface fragment (A2-SF/9), a thin chert biface fragment (A2-SF/10), an exhausted chert biface fragment (A2-SF/11), and a chert biface preform, discard (A2-SF/12) were discovered during excavations. Ceramics from Level 2 suggest a Maxik phase date of 750-875 A.D. for stairside construction, given the abundance of sherds of the Cayo, and Belize ceramic Groups, and a few sherds representing the Mount Maloney, Dolphin Head Red, and Meditation Ceramic Groups. One dedicatory cache (*A2-SF/1*) was found beneath the Level 2 stairside (see Chapter 5).

Level 1. Level 1 consisted of a surface/humus layer which included some fall materials (see Figure 4.47). This deposit was loose to moderately compact, and contained mainly pebble (0 4-6.4 cm) and cobble sized (6.4-25.6 cm) sedimentary clasts, along with a number of boulder sized (> 25.6 cm) cut-stones (fall materials). Roots and rootlets were prevalent. The thickness of the deposit ranged from ca. 2-40 cm.

Ceramics and lithics were abundant in this matrix Prior to excavations a granite metate fragment (A2-SF/15) and a granite mano fragment (A2-SF/16, Figure 4.52) were discovered on the surface of the unit. Within the level a fragment of granite metate (A2-SF/2, Figure 4.51), and a proximal section of an obsidian blade (A2-SF/1) were retrieved. The ceramics from this stratum were predominantly from the Maxik phase (675-750 A.D.). The majority of these were types representative of the Dolphin Head, Mount Maloney, Belize, and Cayo Ceramic Groups. Given the presence of the early

Figure 4.51. Granite metate fragment (A2-SF/2) from the Level 1 (surface/humus) deposit in Unit A2-1 (drawing by Tina Christensen and Gyles Iannone).

Figure 4.52. Granite mano fragment (A2-SF/16) from the Level 1 (surface/humus) deposit in Unit A2-1 (drawing by Tina Christensen and Gyles Iannone).

facet Maxik phase Dolphin Head sherds, and the late facet Maxik phase Mount Maloney sherds, a date of roughly 750-875 A.D is suggested for this deposit.

Structure B6 Operations

Structure B6 is a relatively small architectural feature situated on the eastern side of the *Bac-Ha* Courtyard (see Figure 3 5) This structure appears to have had a special function, although the exact nature of the activities undertaken within its confines could not be determined. It is, however, impressionistically similar to a sweathouse structure excavated at Cahal Pech (see below). A 2x2 m unit (B6-1) was originally placed in the centre of the B6 structure in order to expose a large section of the terminal architecture (see Figure 4.2) . Adjacent to this a 1x2 m trench (Unit B6-2) was opened at the juncture of the B6 southern wall and the retaining wall separating the *Ac* and *Bac-Ha* courtyards (see Figure 4.2). This unit also exposed a portion of the terminal *Bac-Ha* Courtyard floor. These excavations suggested that B6 was a "special" function structure, although we were unsure as to exactly what type of construct B6 represented. In order to clarify matters, a larger 4x4 m unit (B6-1a) was subsequently excavated. This encompassed the area of the two earlier excavations, and exposed not only a substantial portion of the B6 terminal architecture, but also sections of the terminal courtyard floor (see Figure 4.2).

Excavations within the larger 4x4 m B6-1a unit proved that the terminal B6 structure was a small construct, with masonry walls of medium height, the upper walls and roof having been made of pole-and-thatch. Almost the entire structure interior was taken up by a large "c-shaped" bench. A further sub-unit, B6-1b (.80 cm x 1.50 m) was located within the confines of Unit B6-1a, between the north and south benches, along the primary axis (see Figure 4.53). This was excavated down to bedrock in order to assess the development of architecture at the B6 locus, as well as expose any offerings normally located in this position. The results of these excavations are detailed below. In order to maintain horizontal control within the large 4x4 m B6-1a unit, each vertical level was subdivided into spatially distinct levels. All excavations within the southern bench area received an "a" affix (i.e., Level 3a). In contrast, excavations within the northern bench received a "b" affix (i e , Level 3b, Level 5b) Finally, all excavations in the centre of the structure, within the B6-1b subunit (between the two benches), received

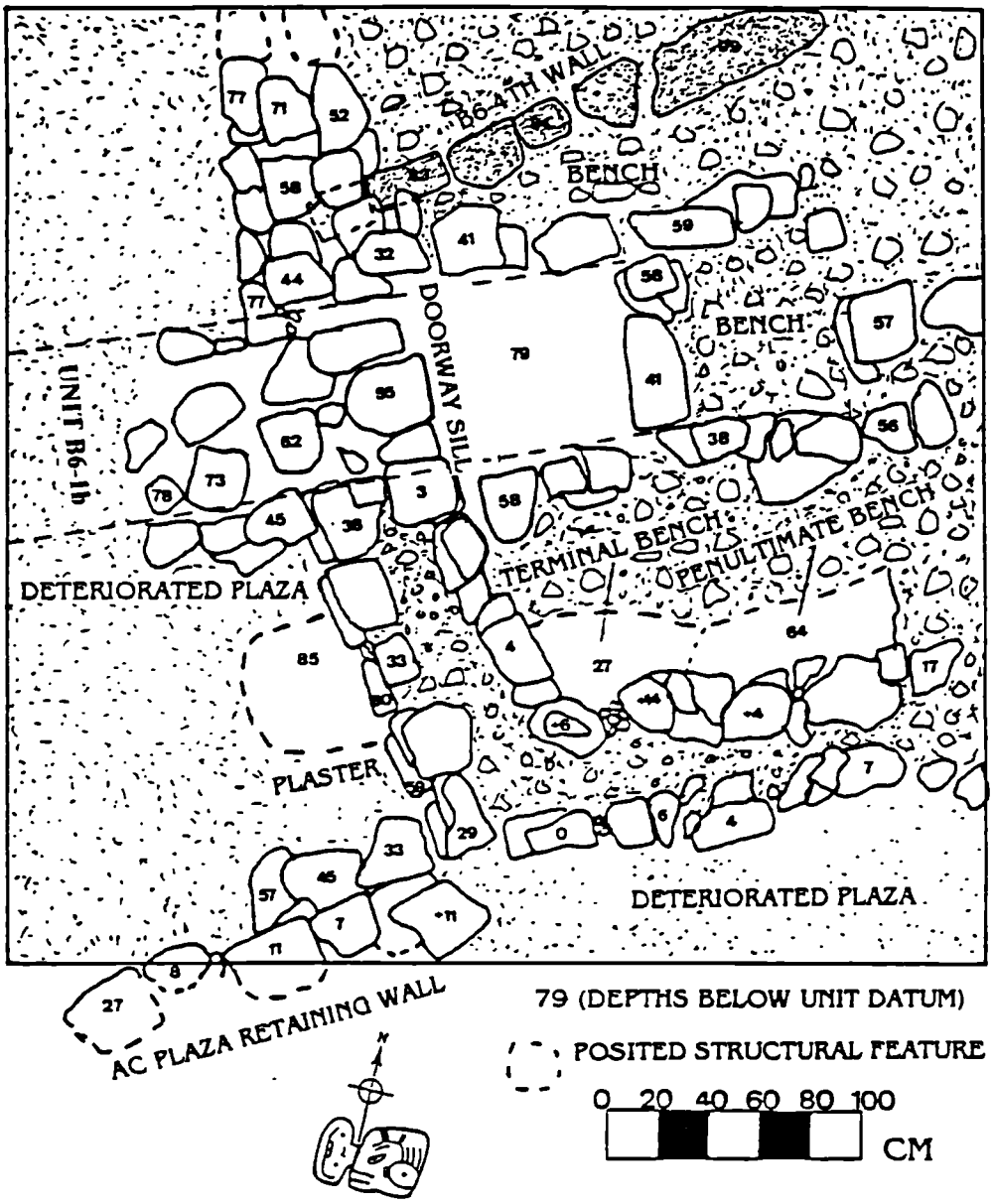


Figure 4.53. Top plan of Level 3, B6-1st.

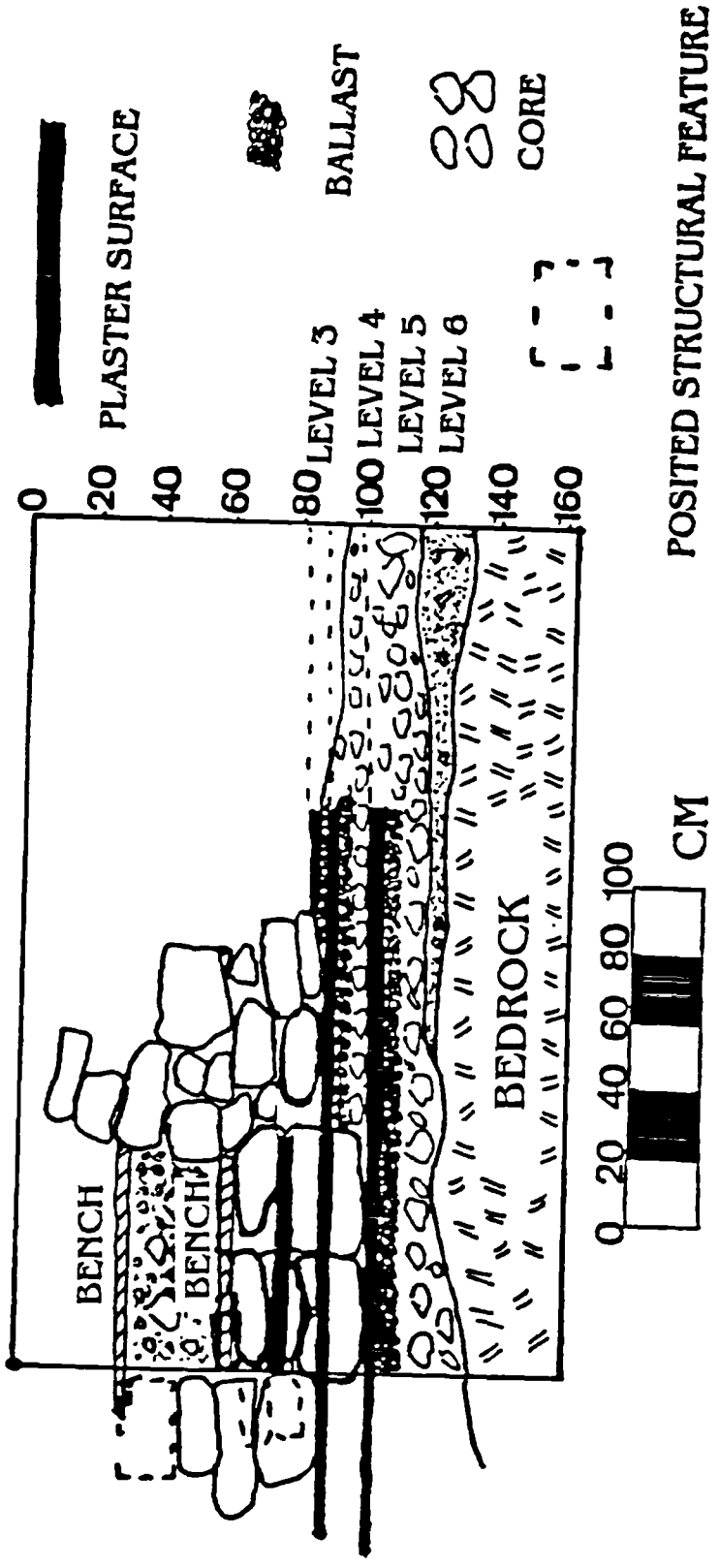


Figure 4 54. Post-excavation profile of Structure B6, Unit B6-1b, facing south.

a "c" affix (i.e., Level 3c, Level 5c). The summary will proceed from the earliest architectural manifestation to the latest (see Figure 4.54). Where necessary particular units or levels will be specified with reference to the spatial location of significant artefact finds or architectural features.

Level 6, B6-4th. Level 6, encountered at ca. 1.20 m below the unit datum (see Figure 4.54), consisted of a brown/grey, silty clay deposit of variable thickness (4-16 cm). Pebble (0.4-6.4 cm) content was low throughout. This overlay bedrock in the western portion of the B6-1b trench (bedrock at 1.24 m below unit datum). In the eastern portion of the trench no sediments were present. Rather, a relatively flat bedrock surface was exposed at ca. 1.25 m below the trench datum. The bedrock outcrop and sediment deposit combined to form a relatively level living surface However, there was no evidence for intentional modification of the substrate. That a structure (B6-4th) was associated with this surface was indicated by the discovery of a section of east-west running facing wall (see Figure 4.53), exposed after removal of Level 5b (B6-3rd northern bench materials, see below). This wall rested on the aforementioned soil surface, and is likely the northern facing wall of a postulated B6-4th structure. The "clean" bedrock may have acted as the interior surface for this structure. The depth of the sediment/bedrock sustaining surface for this hypothesised structure coincides quite closely with the depth for the original courtyard surface exposed in Units A2-1, near the juncture of the *Bac-ha* and *Ac* courtyards (see above), and in Unit B8-2a (see below).

Lithic debitage was encountered in small percentages, and faunal remains were rare. Sherds were abundant. No significant artefacts were recovered. The ceramic assemblage was made up primarily of Late Classic, Maxik phase (675-875 A.D.) types, mainly representatives of the Cayo and Belize Ceramic Groups. Additional sherds were of the transitional Sotero Ceramic Group. The assemblage indicates that a construction date of 675-750 A.D. is likely for B6-4th. This date corresponds with the first evidence for a "structure" at the B8 locus, and indications are that Courtyard B reached its maximum size by this time. In sum, B6-4th appears to have been a small structure with masonry lower walls, pole upper walls, and a thatch roof The underlying bedrock appears to have been employed without alteration as the initial living surface for this structure.

Level 5, B6-3rd. Level 5, B6-3rd was excavated in the central trench (Unit B6-1b, Level 5c), and in the southern (Unit B6-1a, Level 5a) and northern (Unit B6-1a,

Level 5b) benches (see Figure 4.54). Indications are that B6-3rd is a substantial modification to, and slight enlargement of the earlier B6-4th construct. Within the B6-1b (Level 5c) trench the new B6-3rd floor surface was isolated at ca. 1.01 m below the unit datum. This moderately well preserved floor was ca. 20-32 cm thick, and consisted of a ca. 4 cm thick plaster surface overlying a ca. 8 cm ballast layer (small aggregate), and a ca. 20 cm core deposit (mainly cobble sized clasts [6.4-25.6 cm] within a dark grey matrix). To the east this deposit directly overlay the previously mentioned limestone bedrock deposit (at ca. 1.25 m below the unit datum). To the west the aforementioned lense of silty clays (Level 6, B6-4th) occurred between the core deposit and the bedrock.

The basal courses of the southern and northern benches rested directly on the Level 5, B6-3rd floor surface, implying that these features were initially constructed at this time. During the B6-3rd occupation these benches had been ca. 44 cm high, and ca. 1.00 m wide. The plaster surface of the benches, encountered at ca. 62 cm below the unit datum, exhibited poor to fair preservation. Three course walls faced each bench. Excavations within the southern (Level 5a) and northern (Level 5b) benches indicated that they were comprised of a 9 cm plaster surface, ca. 10 cm ballast layer (small aggregate), and a ca. 25 cm aggregate core deposit. The earlier B6-4th facing wall had ceased to be employed at this time, entirely new walls having been constructed. These walls were of double-faced masonry construction. The body of the wall consisted of a moderately compact fill deposit of silty clays, interspersed with high percentages of pebble sized (0.4-6.4 cm) clasts. On average these walls were ca. 70-80 cm thick. The base courses of the inner wall face were sustained by a deposit of aggregate core, the latter being level with the bench surface (ca. 62 cm below unit datum). The outer facing wall had a two course basal outset, and was sustained by the courtyard surface (at ca. 1.01 m below the unit datum). In sum, the B6-3rd structure initially comprised a small building with low masonry walls, and two parallel benches. The upper walls and roof were probably of pole-and-thatch. The poles themselves probably intruded into the wall body between the two wall faces

Ceramic sherds and lithic debitage were recovered in small numbers, and faunal remains were rare. No significant finds were recorded The small ceramic sample contained sherds of the Maxik phase (675-875 A D.) Cayo, Dolphin Head, Meditation,

and Belize Ceramic Groups. The transitional Sotero Ceramic Group was also well represented. This suggests a date of 675-750 A D. for the construction of B6-3rd.

Level 4, B6-2nd. Level 4, B6-2nd, the penultimate construction at the B6 locus, consisted of a series of modifications to the earlier B6-3rd structure (see Figure 4.54). Excavations were concentrated within the axial B6-1b trench. These efforts exposed a new, well preserved interior floor surface at ca. 91 cm below the unit datum. This floor had a ca. 1-2 cm thick plaster surface which was painted red Underlying this a ca. 9 cm ballast layer, primarily small aggregate, and a ca. 4 cm aggregate core deposit were discovered. The 14-15 cm uplifting of the interior floor apparently corresponded with the raising of the *Bac-ha* Courtyard (to ca. 91 cm below unit datum), although this event may have been restricted to the immediate B6 locus.

The red painted surface was only encountered within the confines of the B6-2nd structure. Whether this results from differential preservation, or whether the plaza surface was not finished in this manner cannot be determined, given the poor preservation of the latter. The red painted surface ran to the east, were it met a two course wall. This wall, the top of which was exposed at ca. 61 cm below the unit datum, formed the facing wall for the new central bench addition (see Figure 4.53). This act completed the "c-shaped" bench feature. The base courses of the central bench facing wall rested directly upon the new floor surface. The red paint was only exposed to the west of the wall. Behind this wall the floor was poorly prepared, indicating that it had not been surfaced for occupation, but rather as a sustaining surface for the new bench. The top of the new central bench corresponded with those of the previous B6-3rd southern and northern benches, implying that these features were not modified at this time. Similarly, there is no evidence for any modifications to the structure walls. In sum, other than the raising of the interior and adjacent exterior living surfaces, B6-2nd modifications focused primarily on the interior of the structure, with the addition of a central bench and the new red painted floor. As with the earlier constructs, it appears that the lower walls of B6-2nd were of double-faced masonry construction, and the upper walls poles. A thatched roof was probably also present.

Ceramic sherds and lithic debitage were recovered in very small percentages, and faunal remains were extremely rare. No significant finds were recovered from these excavations The small sherd assemblage consisted primarily of Maxik phase (675-750 A.D.) ceramics, of the Cayo Ceramic Group. A precise date is difficult to provide given

this limited evidence. However, taking into consideration the earlier B6-3rd assemblage, and the postulated date for the following terminal architecture (see below), a date for the B6-2nd modifications of 750-875 A D. seems probable.

Level 3, B6-1st. Level 3, B6-1st, symbolises the terminal architectural feature at the B6 locus (see Figures 4.53 and 4.54). Excavations into this structure were carried out within the B6-1b axial trench (Unit B6-1b, Level 3c), and a small test into the southern bench (Unit B6-1a, Level 3a). As with the previously discussed B6-2nd construct, B6-1st represents a series of modifications to an earlier structure, rather than an entirely new construction Preservation of the B6-1st architecture was relatively poor. Much of the plaster floor surface had deteriorated, and the majority of the three bench surfaces and associated facing walls had disintegrated and/or collapsed. In order to provide the clearest summary of the B6-1st modifications it is profitable to begin with the exterior alterations.

In conjunction with the B6-1st modifications the associated courtyard was raised by ca. 6 cm. The top of this new courtyard surface, exposed at ca. 85 cm below the unit datum, was in an extremely poor state of preservation. Only isolated patches of plaster remained to suggest its original height. This effort resembles a reflooring event rather than an actual construction effort. The reflooring raised the courtyard midway up the base courses of the earlier B6-2nd basal outset. Thus a one-and-a- half, rather than two course outset now existed at the base of the B6-1st facing walls. Interestingly, where the B6-1st structure met the retaining wall separating the *Bac-ha* and *Ac* courtyards a small series of steps was discovered. These steps, built into the courtyard retaining wall, would have facilitated quick access into or out of the *Bac-ha* Courtyard. However, these did not comprise a "formal" stair per se.

In association with the elevation of the courtyard, alterations to the structure entrance were also made. These alteration included the construction of a three riser stair, which led from courtyard level (85 cm below unit datum) to the door jam (ca. 50 cm below unit datum). Each riser was ca. 10 cm in height, and ca 40-45 cm in depth. This step was bordered by low balustrades. The ultimate stair riser formed a doorway sill (ca. 50 cm below the unit datum), which was faced on the eastern side The interior floor surface was ca 29 cm lower than this sill (ca 79 cm below the unit datum). As previously mentioned, the interior plaster surface had completely deteriorated. All that remained to suggest the height of this new floor was the underlying ballast layer, which

consisted primarily of small aggregate with a few cobble sized (6.4-25 6 cm) inclusions. This interior surface had been raised approximately 14 cm above the corresponding B6-2nd interior floor.

In all likelihood the three benches were elevated as well, although this can only be proven for the southern feature. In the two other cases the entire upper benches were missing, as a result of the outward collapse of the interior and exterior facing walls, which had previously retained the bench fill. In the southern bench a section of the terminal plaster surface was isolated at ca. 27 cm below the unit datum. This provides a height for the bench, and indicates that it was raised ca. 34 cm above the previous B6-2nd southern bench. This new bench surface was ca. 52 cm higher than the contemporaneous interior floor surface. A test into the bench remnant (Unit B6-1a, Level 3a) proved that the fill was predominantly aggregate core, containing moderate percentages of pebble (0.4-6.4) and cobble (6.4-25.6 cm) sized sedimentary clasts. It is also likely that the B6-1st masonry walls were heightened at this time. Unfortunately, because the upper segments of these walls were the first portions to collapse we were unable to isolate any sections attributable specifically to the terminal B6-1st structure. In summary, B6-1st was another modification to an earlier structure, the benches and living surface having been raised, as well as the facing walls. The addition of a stair and doorway sill, however, were new features. Given the architecture, it is likely that pole upper walls and a thatched roof continued to be employed at this time.

Lithic debitage and sherds were recovered in moderate percentages. The latter were especially prominent in the southern bench fill (Unit B6-1a, Level 3a). Faunal remains were rare. A few slate fragments (5) were recovered from below the stairs. The medial section of an obsidian blade (B6-SF/7), and a chert biface fragment (B6-SF/21) were recovered from the interior floor fill (Unit B6-1b, Level 3c). A chert scraper (B6-SF/12), and a granite mano fragment (B6-SF/13, Figure 4.55b) were discovered within the southern bench fill (Level 3a). The ceramics from the interior floor and bench test were predominantly from the Late Classic, Maxik phase (675-875 A.D.). Representatives of the Belize, Cayo, Meditation, and Mount Maloney Ceramic Groups dominated. This assemblage suggests a date of 750-875 A.D. for the B6-1st modifications.

Level 2. Level 2, excavated in 1992 in the 2x2 m B6-1, and 1x2 m B6-2 units, and in 1993 in the larger 4x4 m B6-1a unit, consists of a fall deposit of variable

Figure 4.55. Groundstone artefacts from Structure B6. (a) grooved, granite sphere (B6-SF/18); granite mano fragment (B6-SF/13, drawings by Tina Christensen and Gyles Iannone)

Figure 4 56 Granite mano fragments from Structure B6: (a) B6-SF/10, (b) B6-SF/23 (drawings by Tina Christensen and Gyles Iannone).

thickness. The materials which form the majority of the matrix, pebble (0 4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts, derive from the collapse of structural portions of B6-1st and B6-2nd.

Lithic debitage and sherds were encountered in moderate percentages. Faunal remains where rare. Within Unit B6-2 a whole obsidian blade (B6-SF/1), two granite mano fragments (B6-SF/10 [Figure 4.56a], B6-SF/23 [Figure 4 56b]), a grooved, granite sphere (B6-SF/18, Figure 4.55b), three chert biface fragments (B6-SF/8, /9, /19), and an obsidian blade "fragment" (B6-SF/2) were recovered. Other special finds came from excavations in Unit B6-1a, and included, a thin biface fragment (B6-SF/20), a bifacial chert chopper (B6-SF/22), the proximal section of an obsidian blade (B6-SF/6), the medial section of an obsidian blade (B6-SF/4), and a section from a ceramic flute or whistle (B6-SF/5). A chert biface fragment (B6-SF/17) was retrieved from the southern bench fill (Level 2a) in the latter unit. Ceramics were predominantly from the Late Classic, Maxik phase (675-875 A.D.). Representatives of the Cayo, Belize, Dolphin Head, and Mount Maloney Ceramic Groups dominated. Unfortunately, given the formation processes involved in the deposition of the fall deposit, the ceramic assemblage is in actuality a mixture of materials related to both B6-2nd and B6-1st. However, it does reaffirm the postulated dates of 750-875 A.D. for the penultimate and terminal structures.

Level 1. Level 1, a surface/humus deposit of variable thickness, capped the previously discussed fall materials. This deposit consisted primarily of humus materials and fine sediments, with many roots and rootlets. Pebble sized (0.4-6.4 cm) clasts also occurred in moderate percentages. The matrix was moderate to loosely compact.

Within this deposit lithic debitage and ceramic sherds were recovered in moderate percentages. Faunal remains were rare. A quartzite hammerstone (B6-SF/11), and a medial section of obsidian blade (B6-SF/3), were recovered from Unit B6-2. A chert biface fragment (B6-SF/15), a thin biface fragment (B6-SF/14), and a chert scraper or knife (B6-SF/16) were obtained from Unit B6-1a. To the southeast of the B6-1st stair a probable termination cache was recognised, consisting of numerous large sections of broken pottery. This "ritual" deposition was situated at the juncture of B6-1st and the retaining wall separating the *Bac-ha* and *Ac* courtyards. The sherds were primarily unslipped varieties of the Late Classic, Maxik (675-875 A.D), Cayo Ceramic Group Unfortunately, this assemblage alone cannot provide us with a more specific date for the

deposition of these materials, and by association the abandonment of the structure Indications are that such an abandonment would have occurred between 750-875 AD.

In summary, B6 seems to represent a special function structure Its initial construction coincides with the Late Classic, Maxik phase (675-875 A D) increase in construction activity both within the Zubin site core and periphery. Given its extremely small size and elaborate bench area, B6 does not resemble other excavated residential structures in the vicinity. The red painted floor surface also implies that this building was adorned with extra effort. On the other hand, the lack of ritual deposits, other than the ubiquitous termination cache, seems to rule out the notion that this was a ceremonial structure. Similarly, the mundane nature of the artefact inventory recovered during excavations does not immediately suggest that elaborate rituals were undertaken within the confines of the structure. Its narrow doorway, and bench-filled interior is similar to the Structure B-5 "sweathouse" in the Cahal Pech site core (Awe 1992:146-148), and this smaller structure may have therefore served a similar function. However, this is only a tentative interpretation, and the function and symbolic significance of this structure remains a mystery. The best guess remains that it served a special function, but to speculate further would be unwarranted.

Structure B8 Operations

Structure B8, situated on the western side of the *Bac-Ha* Courtyard, was initially considered to have been a residential structure surmounted by a pole-and-thatch superstructure (see Figure 3.5). Excavations reaffirmed the validity of this postulation. Unit B8-1, a 2x2 m unit (see Figure 4.2) was excavated in hopes that this it would expose not only a portion of the B8 terminal architecture, but also some of the terminal courtyard floor, and a section of the retaining wall separating the *Ac* and *Bac-Ha* courtyards. Unfortunately the latter goal was not achieved Subsequently, Unit B8-2, a 4x4 m excavation, was opened adjacent to Unit B8-1. This unit exposed a large portion of the B8 terminal architecture (see Figure 4.2). A smaller 2x2 m unit (B8-3) was opened adjacent to the northeastern boundary of Unit B8-2 in order to expose more of the *Bac-Ha* Courtyard. The excavation of these units was aimed at providing an understanding of structure function and constructional elaboration. Within the confines of the larger B8-2 unit an axial trench (Unit B8-2a) was excavated down to bedrock in order to facilitate an understanding of the architectural development of the B8 locus, as

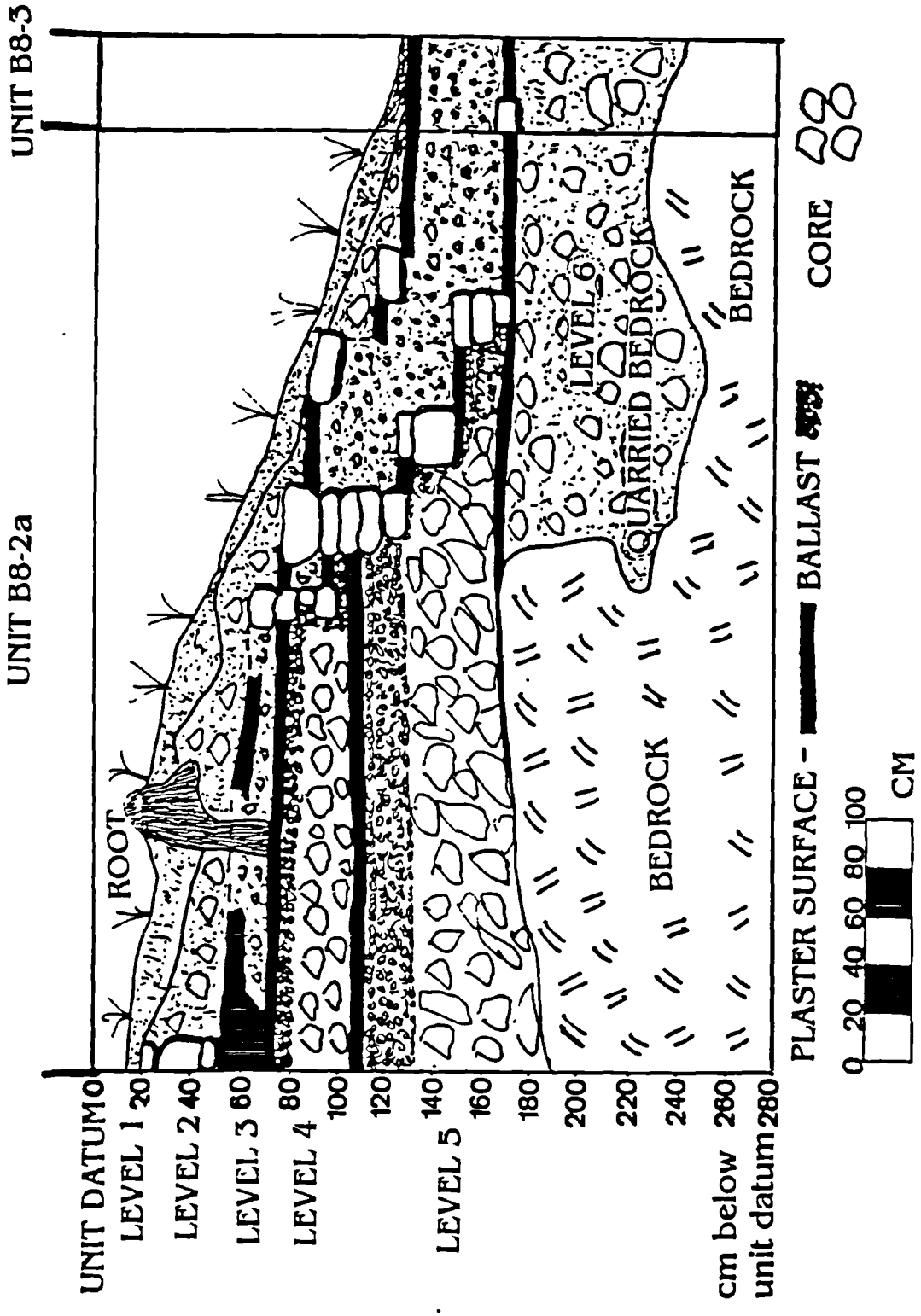


Figure 4.57. Post-excavation profile of Structure B8, Unit B8-2a, facing north.

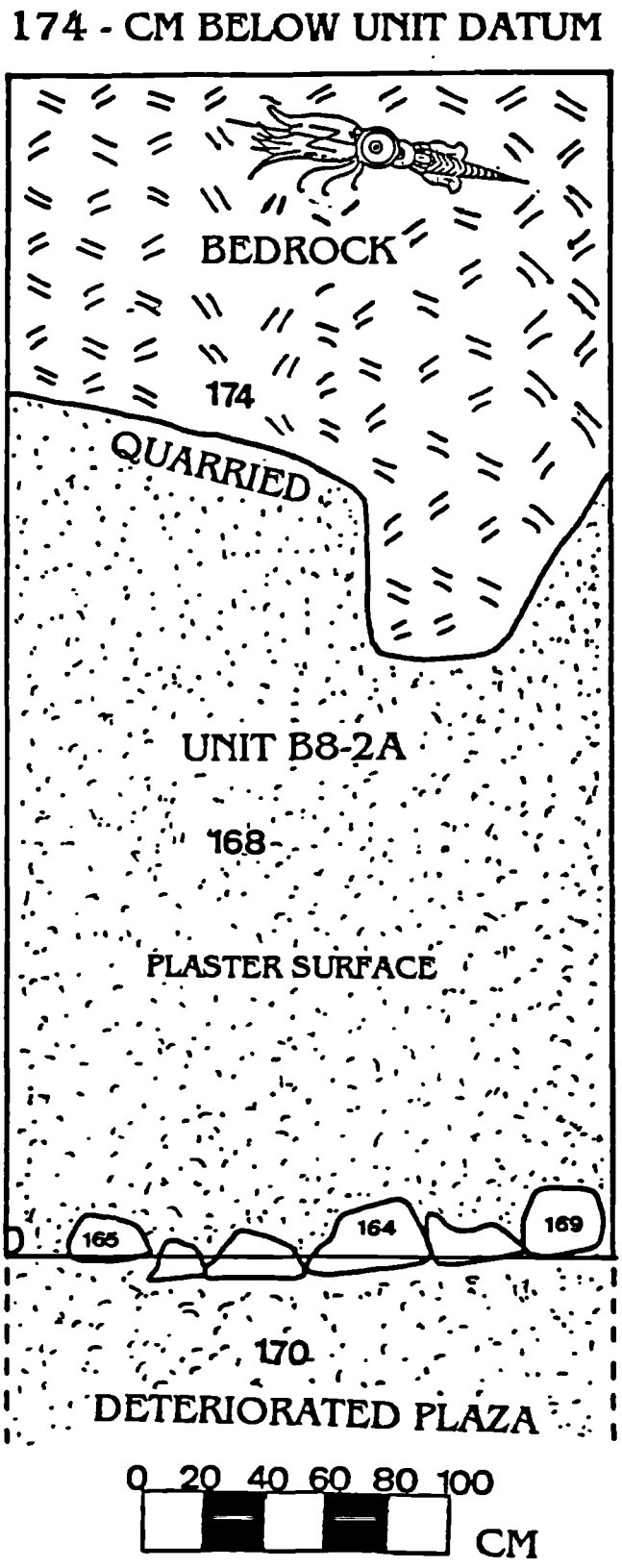


Figure 4.58. Top plan of Level 6, Structure B8.

well as expose any ritual deposits normally situated along this line (see Figure 4.2). A small exploratory trench (Unit B8-3a) was also excavated within the confines of the larger B8-3 unit in order to clarify the construction sequence Within the following summary the B8 locus will be discussed from the earliest occupation to the latest. Individual units will be mentioned only when it is deemed necessary to specify the spatial location of significant artefact finds or architectural features

Level 6. Level 6, excavated only in the B8-2a axial trench, represents the earliest construction effort at the B8 locus (see Figures 4.57 and 4.58) Prior to the Level 6 construction this area appears to have been the location of a limestone or *sascab* quarry. Ceramics from the soil immediately overlying the quarried bedrock were all from the Middle Formative, Kanluk Ceramic Complex (900-350 B.C.). Representatives of the Savana, Joventud, and Jocote Ceramics Groups dominated the assemblage. This appears to date the initial quarrying to the late facet Kanluk phase (650-350 B.C.).

Level 6 itself represents a ca. 60-80 cm thick living floor, located in the eastern section of the trench. To the west an unquarried portion of the bedrock outcrop (1.74 m below the unit datum) had been employed, possibly in modified form (flattened and smoothed), as the living surface. The living surface, which extended partially over the eastern portion of the aforementioned bedrock outcrop, was completely deteriorated. A ca. 6 cm ballast layer, mainly small aggregate, was all that remained to suggest the level of the original surface (ca 1.68 m below the unit datum). This overlay a ca. 60 cm deposit of highly compact, dark brown sediments containing moderate percentages of pebble (0.4-6.4 cm) and cobble sized (6.4-25.6 cm) sedimentary clasts. This material had been employed to bring the quarried portion of the bedrock level with the unquarried section. The top of this floor corresponds with the one excavated in Unit A2-1, near the border of the *Bac-Ha* and *Ac* courtyards.

Fewer ceramics were recovered from this earlier excavation, although those that were recovered suggest a transitional Middle Formative/Late Formative date for the construction of the initial *Bac-Ha* living surface. Ceramics from the B8-2a excavations were all of the Middle Formative, Kanluk Ceramic Complex (900-350 B C.). Varieties of the Savana, Joventud, and Jocote Ceramic Groups dominated the assemblage. Thus a late facet Kanluk phase date for the living surface construction is likely given the evidence from the two excavations (ca. 650-350 B.C). As previously discussed, a low, one course, perimeter wall was found in association with this living surface in Unit A2-1.

A similar low, one course wall was also encountered in Unit B8-2a (ca 1.64 m below unit datum; see Figure 4.58). In the latter case the course was intrusive into the small aggregate ballast deposit, suggesting that this may have been the basal course of a low, two course wall. In any event, the correspondences indicate that these two floors are one and the same.

Ceramics and lithic debitage were recovered from Level 6 in moderate percentages. Faunal remains were also discovered in small amounts. Significant artefact finds included the proximal section of an obsidian blade (B8-SF/32), a chert biface fragment (B8-SF/61), and a section of conch shell (*Strombus*). No further construction in the *Bac-Ha* Courtyard is attributable to the time period between the late facet Kanluk phase (ca. 650-350 B.C.) and the Late Classic, Maxik phase (675-875 A.D.). This is intriguing, and it suggests that this portion of the site continued to be peripheral in terms of activities and construction until quite late in the Zubin occupation. The poor preservation of the floor, and lack of evidence for refurbishing reaffirms this position. Whether in fact special activities, such as craft production, took place at this locus cannot be determined given the present artifactual data base.

Level 5, B8-3rd. Level 5, B8-3rd, excavated in Unit B8-2a, represents the first structure constructed at the B8 locus (see Figures 4.57 and 4.59). The earlier courtyard floor continued to be employed, and does not appear to have been refloored in conjunction with the construction of the B8-3rd architecture. B8-3rd consisted of a moderately well preserved platform, exposed at ca. 1.04-1.08 m below the unit datum. Preservation of the platform surface, encountered at ca. 1.07 cm below the trench datum) was good, and indications are that this surface was refurbished at least once. The plaster was ca. 4 cm thick, and was underlain by ca. 21 cm layer of small aggregate ballast (primarily pebble 0.4-6.4 cm sized clasts within a mortar matrix), and a ca. 54 cm dry-stone core deposit (mainly cobble 6.4-25.6 cm sized clasts). The platform itself ran 2.46 m to the east, where it terminated at the nose of a ca. 21 cm high, three course stair riser. The toe of this riser in turn formed the edge of a 34 cm deep tread. This was followed by a further 20 cm high, two course riser, and a 48 cm deep tread. A final 20 cm high, three course riser, led down to the courtyard surface (ca. 1.68 m below the unit datum). In sum, B8-3rd was a ca. 62 cm high platform accessed via three steps. No postholes were discovered during excavations, but indications are that B8 was surmounted by a pole-and-thatch superstructure.

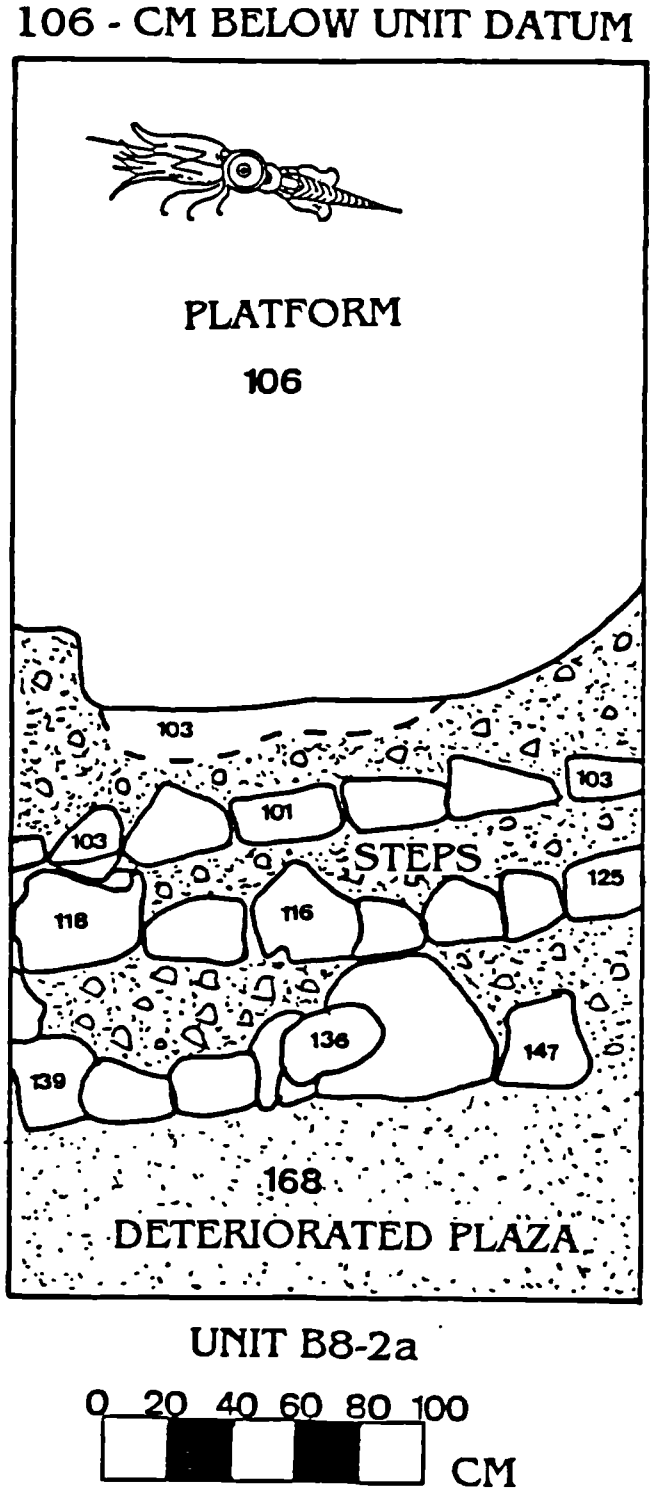


Figure 4.59. Top plan of Level 5, B8-3rd.

Lithic debitage and ceramic sherds were moderately abundant within the fill, and a few faunal samples were discovered. No ritual deposits were recovered in the axial trench. The only significant artefact find was the medial section of an obsidian blade (B8-SF/31). Ceramics form the B8-3rd excavations were predominantly from the Late Classic, Maxik phase (675-875 A.D.), and included varieties indicative of the Dolphin Head, Belize, Mount Maloney, Chunhuitz, and Cayo Ceramic Groups Some transitional varieties, primarily of the Sotero Ceramic Group, were also present. This assemblage, and those of subsequent B8 structures (see below), suggest a 675-750 A.D. date for the construction of Structure B8-3rd.

Level 4, B8-2nd. Level 4, B8-2nd, represents a modification to the earlier B8-3rd architecture (see Figures 4.57 and 4.60). Again, this structure was only exposed in the Unit B8-2a axial trench. Modifications included raising the height of the platform by ca 34-36 cm above the previous B8-3rd level. The surface of the new B8-2nd platform, encountered at 71-73 below the unit datum, was moderately well preserved. It consisted of a ca. 3 cm plaster cap, which overlay a ca. 5 cm ballast layer (mainly pebble sized [0.4-6.4 cm] clast), and a ca. 27 cm thick dry-stone core deposit (primarily cobble [6.4-25.6 cm] sized clasts). The eastern terminus of the platform met with the nose of a new, 19 cm high, three course riser. A ca. 40 cm deep tread then ran to what was the upper stair riser for the earlier B8-3rd structure. This riser had an additional course added to its height, making it a four course, ca. 32 cm high riser. The lower two B8-3rd stairs and Level 6/B8-3rd courtyard continued to be employed in unaltered form. The additions combined to form a ca. 96 cm high platform accessed via four steps. Indications are that this platform was surmounted by a simple pole-and-thatch structure.

Lithic debitage, and ceramic sherds were recovered in moderate amounts. Faunal remains were encountered in small numbers. Artefacts of note included two medial sections of obsidian blades (B8-SF/29, 30), and the proximal section of an obsidian blade (B8-SF/28). The ceramic assemblage included numerous Late Classic, Maxik phase (675-875 A.D) types, including members of the Dolphin Head, Belize, Mount Maloney, Chunhuitz, and Cayo Ceramic Groups Sherds of the transitional Sotero Group were also present. Given this assemblage, and the architectural sequence, a date for the B8-2nd structural modifications of 675-750 A D. is likely.

Level 3, B8-1st. Level 3, B8-1st, the terminal B8 architecture, was exposed in Units B8-1, B8-2, B8-3 and B8-3a (see Figures 4.57 and 4.61). This new structure

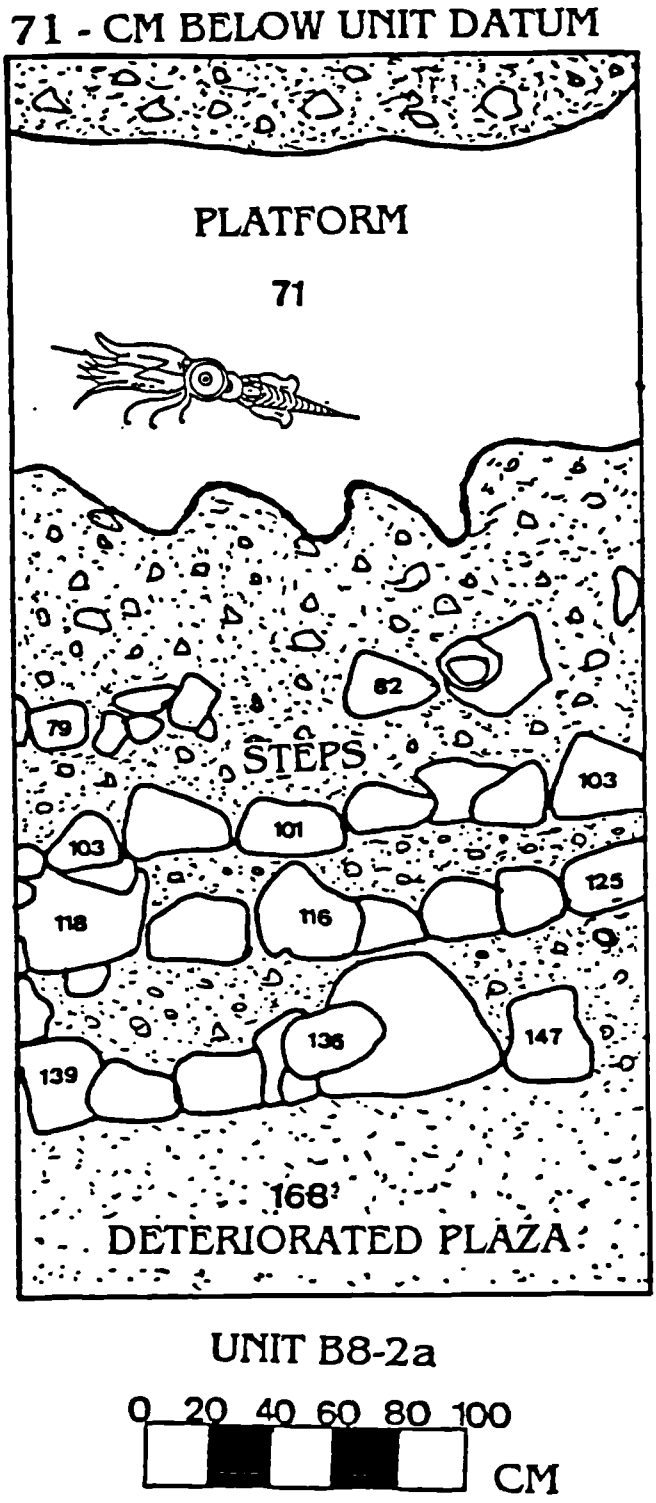


Figure 4 60. Top plan of level 4, B8-2nd.

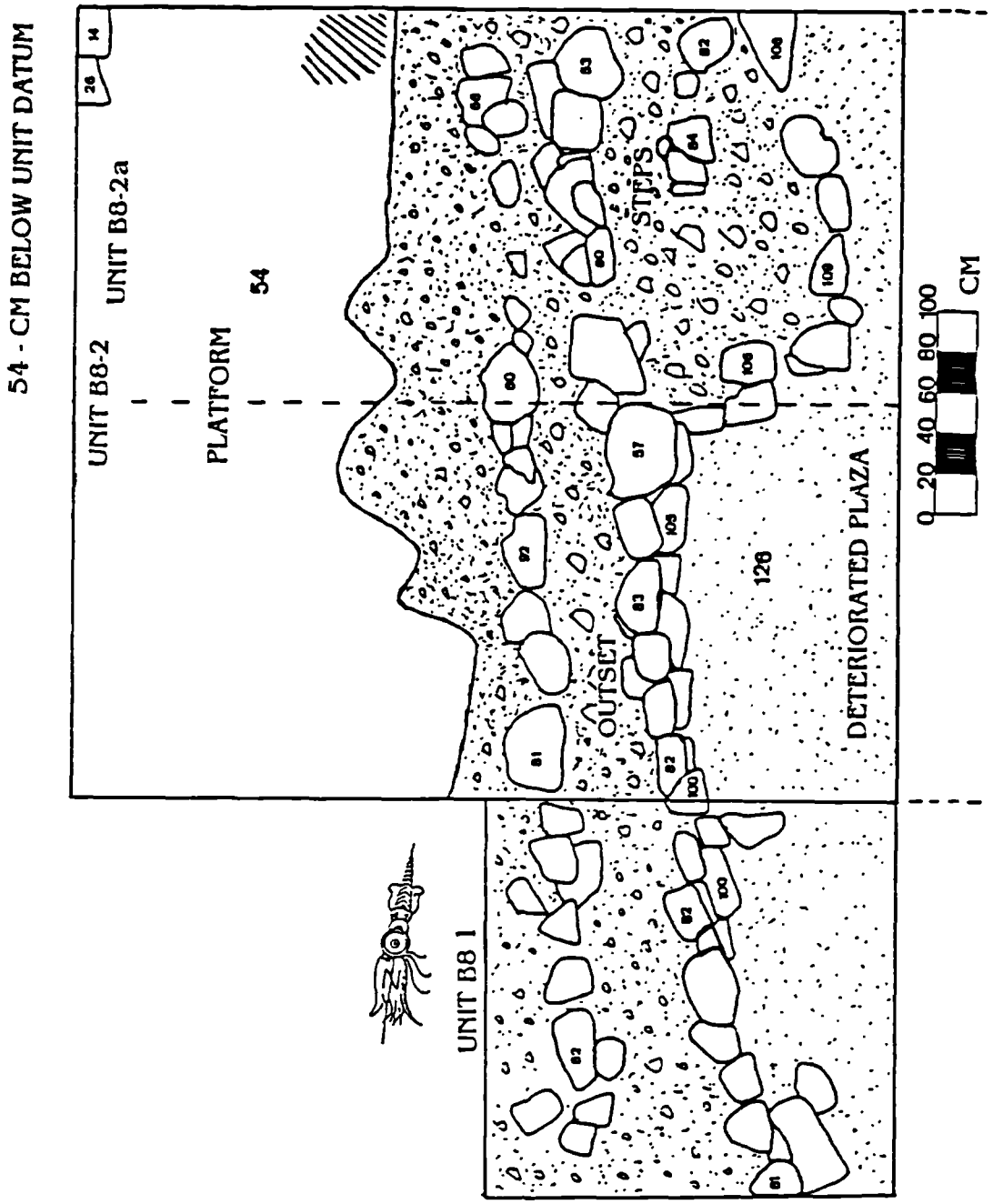


Figure 4.61. Top plan of Level 3, B8-1st

followed the architectural pattern of the two earlier structures. For the most part B8-1st constitutes an entirely new structure, although there are indications that it incorporated some earlier architectural features (but see below). The B8-1st platform was raised ca. 18 cm above the previous B8-2nd living surface. The preservation of this floor was poor, both root action and ant activity had completely destroyed large sections of it. The surface was encountered at ca. 54 cm below the unit datum, the plaster being ca. 8 cm thick. Indications are that at least two reflooring events had occurred. Beneath the plaster surface a ca. 10 cm ballast layer of small aggregate, primarily pebble (0.4-6 4 cm) sized clasts interspersed within a mortar matrix, was encountered. To the west a section of low, three course wall (ca. 32 cm high), was discovered The bottom of this wall rested on the platform surface. This wall, the top of which was exposed at ca. 20 cm below the unit datum, probably represents the back wall of a predominantly pole-and-thatch superstructure.

To the east the platform terminated at the nose of a ca. 12 cm high, one course riser. This new course had been placed atop the earlier B8-2nd upper riser, although only the upper course was employed in the terminal architecture. This was followed by a ca. 44 cm deep tread. The upper course of the next riser was placed directly upon the earlier B8-2nd penultimate riser. However, only the upper course actually formed part of the new step. Moving from this ca. 8 cm high riser, and a further 66 cm deep tread was exposed, followed by a ca. 24 cm high riser. The nose of the latter riser was formed by a limestone block, the toe by small aggregate. The tread of the next step was ca. 40 cm deep. This tread terminated at a final, one course (ca. 10 cm high) riser, which led down to a new courtyard surface (ca. 1.26 cm below the unit datum). A poorly preserved, two course (ca. 20 cm high), north-south wall, in line with the upper stair riser, ran the length of the structure. Parallel to this, ca. 40 cm to the east, a lower four course (ca. 40 cm high) facing wall fronted the structure, the courtyard acting as its sustaining surface. This wall also ran north-south, and was aligned with the penultimate stair riser. These features combined to form a ca. 40 cm deep outset which ran the length of the B8-1st structure, perpendicular to the outset stair. The lower two courses of the eastern facing wall were much better cut, and it appears that they may have been part of the earlier B8-2nd and B8-3rd architecture (only excavated in the B8-2a trench) If this postulation is correct than an outset and outset stair may have fronted all three structures.

The courtyard surface had completely deteriorated, although indications are that it was originally 1.26 m below the unit datum. The courtyard had been raised ca 42 cm from its previous level. The intervening ballast layer, primarily pebble sized (0.4-6.4 cm) clasts interspersed with dark brown sediments, was moderately compact. Evidence for burning was present in the upper portion of the floor, likely resulting from modern burning of the area for cattle grazing. This floor surface corresponded with the courtyard floor exposed in the A2-1 (see above) excavations. It is of interest that the B8-1st, and probably the earlier B8-2nd and B8-3rd stairs were not situated along the primary axis, but rather to the north of this. In summary, the terminal B8 (B8-1st) architecture consisted of a ca. 72 cm high platform, originally surmounted by a pole-and-thatch superstructure. This superstructure was accessed via an outset stair with four steps. The B8-1st structure was fronted by an outset which ran north-south, perpendicular to the outset stair.

During the B8-1st excavations ceramic sherds and lithic debitage were recovered in moderate numbers, and faunal remains were also encountered in small percentages. The only significant find recovered from Unit B8-2a was an exhausted, chert biface (B8-SF/49). A medial section of an obsidian blade (B8-SF/27) was retrieved from Unit B8-3a. Ceramics representing the Late Classic Maxik phase (675-875 A.D.) were prominent. Representatives of the Dolphin Head, Mount Maloney, Cayo, and Belize ceramic groups dominated. A few transitional Sotero Ceramic Group sherds were also recovered. The increase in percentages of Mount Maloney sherds, a late facet Spanish Lookout ceramic group (see Gifford 1976) suggest that a date of 750-875 A.D. for the construction of B8-1st is likely.

Level 2. Level 2, a fall deposit, was excavated in Units B8-1, B8-2, and B8-3 (see Figure 4.57). This deposit, which consisted primarily of cobble sized (6.4-25.6 cm) sedimentary clasts, derived mainly from the deterioration of the terminal B8 architecture Pebble sized (0.4-6.4 cm) clasts and lenses of compact soil were also encountered. Within Units B8-1 and B8-2 this deposit was excavated in two spatially distinct levels, 2a and 2b. Level 2a was removed from in front of the outset. In contrast, Level 2b was excavated from the area to the west of this wall, primarily from the B8 platform area. The fall deposit varied in thickness from 10-30 cm.

Sherds and lithic debitage were discovered in moderate percentages in Unit B8-1, Levels 2a and 2b (originally 3a and 3b in 1992), and faunal remains were present in

small numbers. Large numbers of ceramic sherds were recovered from the Unit B8-2, Level 2a fall deposit, and lithic debitage was retrieved in moderate numbers. In Unit B8-2, Level 2b ceramics and lithic debitage were encountered in fewer numbers. In Unit B8-3 ceramics were abundant, and lithics were recovered in moderate percentages. Faunal remains were rare, but present in all units. The abundance and size of sherds in front of the stairs (Unit B8-3) and adjacent to the southern stair side (Unit B8-2, Level 2a), suggest that they may have been deposited as part of a termination ritual. The majority date to the Late Classic, Maxik phase (675-875 A.D.), although due to contamination resulting from the formation of the fall deposit a solid date cannot be provided for the termination of B8 occupation.

Significant finds included a section of conch shell (B8-SF/1), the proximal section of an obsidian blade (B8-SF/2), a drilled sherd (B8-SF/3), the medial section of an obsidian blade (B8-SF/16), a chert biface fragment (B8-SF/50), a bifacial chert chopper (B8-SF/52), and a granite metate fragment (B8-SF/63), all recovered from excavations in Unit B8-1, Level 2a (originally 3a in 1992). Excavations in Unit B8-1, Level 2b (originally 3b in 1992), produced a whole obsidian blade (B8-SF/4), a drilled sherd (B8-SF/6), a modified sherd (B8-SF/7), and a granite metate fragment (B8-SF/44). Three proximal sections of obsidian blades (B8-SF/9, /10, /21), a ceramic bead (B8-SF/11), three medial sections of obsidian blades (B8-SF/12, /13, /14), a granite metate fragment (B8-SF/34, Figure 4 62b), a granite mano fragment (B8-SF/35, Figure 4.62c), an exhausted, chert biface fragment (B8-SF/53), a chert drill scraper (B8-SF/54), and a quartzite hammerstone (B8-SF/55) were all recovered from Unit B8-2, Level 2a. Excavations in Unit B8-2, Level 2b produced a medial section of obsidian blade (B8-SF/15), two granite metate fragments (B8-SF/33 [Figure 4.62a], B8-SF/42), and two granite mano fragments (B8-SF/40 [Figure 4 63], B8-SF/41 [Figure 4.64]). Finally, a chert biface fragment (B8-SF/46) was recovered from Unit B8-3a, Level 2. Sherds from the fall deposit were obviously mixed, due to the formation processes involved in the deposition. However, a late Maxik phase date of 750-875 A D. is suggested for the construction and occupation of the B8-1st structure, the architectural feature from which the majority of these sherds derive.

Level 1. Level 1, a surface deposit, consisted primarily of organic humus interspersed with fine silty clays, moderate percentages of pebble sized clasts (0.4-6.4 cm), and many roots and rootlets (see Figure 4 57). Substantial ant activity was also

Figure 4 62. Groundstone artefacts from the Structure B8 fall deposit (Level 2). (a) granite metate fragment (B8-SF/33), (b) granite metate fragment (B8-SF/34), (c) granite mano fragment (B8-SF/35; drawings by Tina Christensen and Gyles Iannone).

Figure 4 63. Granite mano fragment (B8-SF/40) from the Structure B8 fall deposit (Level 2; drawing by Tina Christensen and Gyles Iannone).

Figure 4.64. Granite mano fragment (B8-SF/41) from the Structure B8 fall deposit (Level 2; drawing by Tina Christensen and Gyles Iannone)

Figure 4 65. Groundstone artefacts from Structure B8: (a) andesite metate fragment (B8-SF/56); (b) granite mano fragment (B8-SF/36); (c) granite mano fragment (B8-SF/43; drawings by Tina Christensen and Gyles Iannone).

recognised, leading to areas of high bioturbation This deposit was of variable thickness (5-19 cm), and was excavated in Units B8-1, B8-2, and B8-3. Ceramics and lithic debitage were encountered in moderate percentages, faunal remains being rare. Significant finds from Unit B8-1 included a ceramic figurine arm (B8-SF/5), a granite mano fragment (B8-SF/43, Figure 4.65c), and a chert biface fragment (B8-SF/51). Within Unit B8-2 a granite mano fragment (B8-SF/36, Figure 4.65b), a chert biface fragment (B8-SF/62), and a crudely made, unslipped, miniature ceramic bowl (B8-SF/8) were recovered. The latter may have been a termination offering of some sort, although the crudeness and size of the vessel suggests otherwise. Excavations in Unit B8-3 produced five medial sections of obsidian blades (B8-SF/17, /18, /24, /25, /26), the proximal section of an obsidian blade (B8-SF/20), a notched, proximal section of obsidian blade (B8-SF/19), a ceramic disk (B8-SF/22), a ceramic figurine leg (B8-SF/23), a bifacial chert chopper (B8-SF/37), an exhausted chert biface fragment (B8-SF/38), a chert biface fragment (B8-SF/39), a chert biface preform discard (B8-SF/47), an andesite metate fragment (B8-SF/56, Figure 4.65a), and five granite metate fragments (B8-SF/45, /57, /58, /59, /60). Finally, it should be noted here that a worked slate fragment (B8-SF/48) was recovered within Unit B8-2a during wall cleaning. The context of this find is thus mixed, and an accurate date cannot be provided. Ceramics were mixed, as is expected given the displacement of large portions of the terminal architecture through root action. However, given the assemblage a late Maxik phase date of 750-875 A.D. is suggested for the construction and occupation of the B8-1st structure.

In summary, the initial activity at the B8 locus was associated with quarrying of limestone blocks or possibly *sascab*. This activity occurred sometime during the late Kanluk phase (ca. 650-350 B.C.). These materials were probably employed during construction within the adjacent *Ac* Courtyard. Sometime shortly after this a raised courtyard surface and a low perimeter wall were constructed, akin to features found near the juncture of the *Bac-ha* and *Ac* courtyards, in Unit A1-2. Indications are that bedrock outcrops were modified and employed at this time to form part of the living surface. It is clear that this courtyard construction corresponds with a period of massive building within the *Ac* and *Cutz* courtyards. Given that no residential construction is undertaken at Zubin until much later, it seems probable that more space was required for non-residential activities (e g. public ceremonies and rituals). It is not until the early

Maxik phase (675-750 A.D.) that a residential structure was constructed at the B8 locus (B8-3rd). The timing of this construction coincides with initiation of residential occupation within the *Ac* courtyard.

EXCAVATIONS WITHIN THE *CUTZ* RAISED PLATFORM

The *Cutz* (ocellated turkey) raised platform, located to the south of the *Ac* Courtyard (see Figure 3.5), sustains a solitary pyramidal structure (Structure C9). The raised platform abuts the *Ac* Courtyard to the north, although the *Cutz* platform is well over a meter lower. No other structures are readily apparent in the vicinity of the lone pyramidal mound. However, it is possible that hidden structures are present

Structure C9 Operations

Structure C9 is situated in the southeast corner of the *Cutz* raised platform (Figure 3.5). Excavations were to prove that this was an important Formative period shrine structure. Regrettably, Structure C9 had been extensively impacted by looter's, who had excavated a large trench into the C9 building platform, and what later proved to be the rear of the structure. The initial goal of the C9 operations was to determine the orientation of Structure C9 in relation to the *Ac* and *Bac-ha* courtyards. To achieve this goal three 1x1 m test units were excavated, one into each of the western (Unit C9-1), northwestern (Unit C9-2), and northeastern (Unit C9-3) faces (see Figure 4.2). These test units were employed to expose sections of terminal and penultimate architecture, and enabled us to establish that the structure faced north. This facilitated the placement of a 6x2 m axial trench along the C9 stair, the excavation of which constituted the second research goal (see Figure 4.2). It was through this excavation that data pertaining to temporal growth of the structure, the quality of overall architecture, and location and inventory of ritual deposits was to be acquired. The axial trench was subdivided into two 3x2 m units (Units C9-4 and C9-5) in order to provide tighter horizontal control over artefact assemblages A large balk section was left between the axial trench and the looter's excavation for safety purposes (see Figure 4.66)

The final goal was to clean out the C9 Looter's trench in order to assess the construction sequence, and ascertain how deep the looters had excavated (see Figure

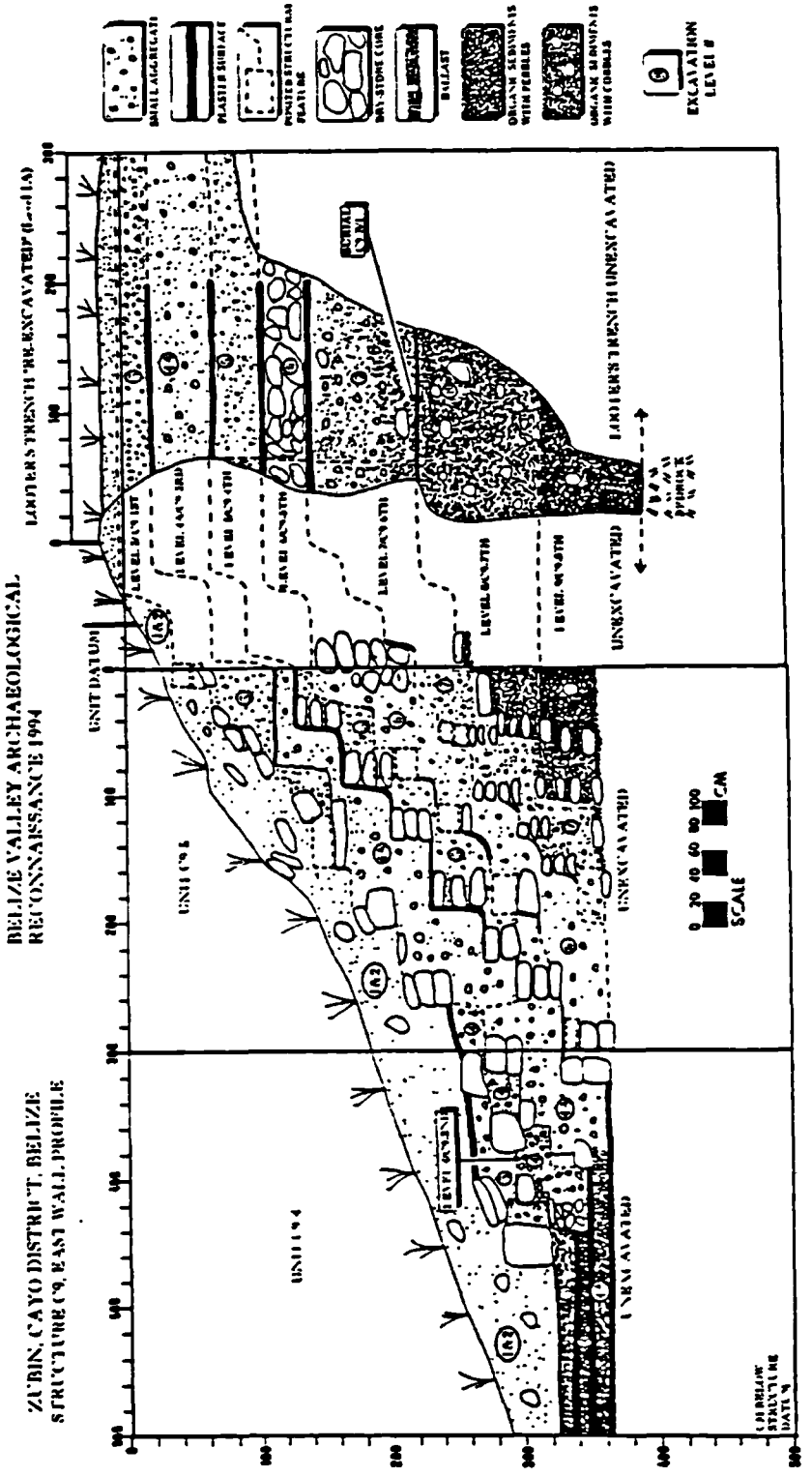


Figure 4.66. Post-excavation profile of Structure C9, facing east.

4.66). We had initially hoped that the looter's trench might be shallow enough to enable us to continue excavations within the platform itself. Unfortunately, our efforts soon indicated that the looters had excavated quite deep into the structure. The extent of this looting activity, in comparison to that described for the other Zubin architecture, suggested that the looters had been successful enough with regard to recovering finds that they deemed it profitable to continue their excavations deep into the mound During re-excavation of the looter's trench six building surfaces were exposed. All of the backdirt was screened in order to recover any finds still present in the mixed deposit, which was designated Level 1A.

The Level 1A ceramic sample was large, and surprisingly, of purely Formative period composition. Sherd samples were taken from beneath the various exposed floors in order to confirm this date. These pristine samples provided evidence for a construction sequence spanning the entire Formative period, beginning in the early facet Kanluk phase (900-650 B.C.) and terminating in the late facet Xakal phase (100-350 A.D.). Debitage was present in moderate percentages within Level 1A. Faunal remains were also recovered in moderate numbers. In addition, the remains of a disturbed burial were interspersed throughout the Level 1A sediments (see Chapter 5). Significant finds recovered from the Level 1A backdirt consisted of a barrel-shaped jadeite bead (C9-SF/1), an irregular shaped jadeite bead (C9-SF/2), a cylindrical jadeite bead (C9-SF/3), a jadeite disk bead (C9-SF/5), one conch shell pendant (C9-SF/7, Figure 4.67i), two medial sections of obsidian blades (C9-SF/4, C9-SF/6), ten greenstone "triangulates" (C9-SF/26, C9-SF/30, C9-SF/31 [Figure 4.68a], C9-SF/32 [Figure 4.68b], C9-SF/34 [Figure 4.69b], C9-SF/35 [Figure 4.70a], C9-SF/36, C9-SF/37 [Figure 4.70b], C9-SF/38 [Figure 4.71a], C9-SF/39 [Figure 4.71b]), two modified greenstone pebbles (C9-SF/33 [Figure 4.69a], C9-SF/50), an irregular chert biface (C9-SF/52), a chert biface preform discard (C9-SF/54), and a quartzite pestle (C9-SF/53) That so many important finds were overlooked by the looters implies that they must have encountered a number of elaborate ritual deposits. The depth of their excavations also attests to this. It would appear that at least two burials were disturbed. One burial was rediscovered, partially intact, during re-excavation (C9-B/1). This interment will be discussed in detail in Chapter 5.

Level 9, C9-8th. Level 9, C9-8th, constitutes the earliest evidence for occupation at Zubin. Due to its central location within the mound, only a portion of the northern

Figure 4.67. Conch shell beads from Structure C9: (a) C9-SF/16, (b) C9-SF/15, (c) C9-SF/17, (d) C9-SF/18, (e) C9-SF/19, (f) C9-SF/20; (g) C9-SF/62, (h) C9-SF/63; (i) C9-SF/7 (drawings by Peter McDonagh and Lucinda Blatch).

Figure 4.68 Greenstone "triangulates" from the Structure C9 looter's backdirt (Level 1A). (a) C9-SF/31, (b) C9-SF/32 (drawings by Matt Edmunds).

Figure 4 69. Greenstone artefacts from the Structure C9 looter's backdirt (Level 1A): (a) modified pebble (C9-SF/33); (b) "triangulate" (C9-SF/34, drawings by Matt Edmunds).

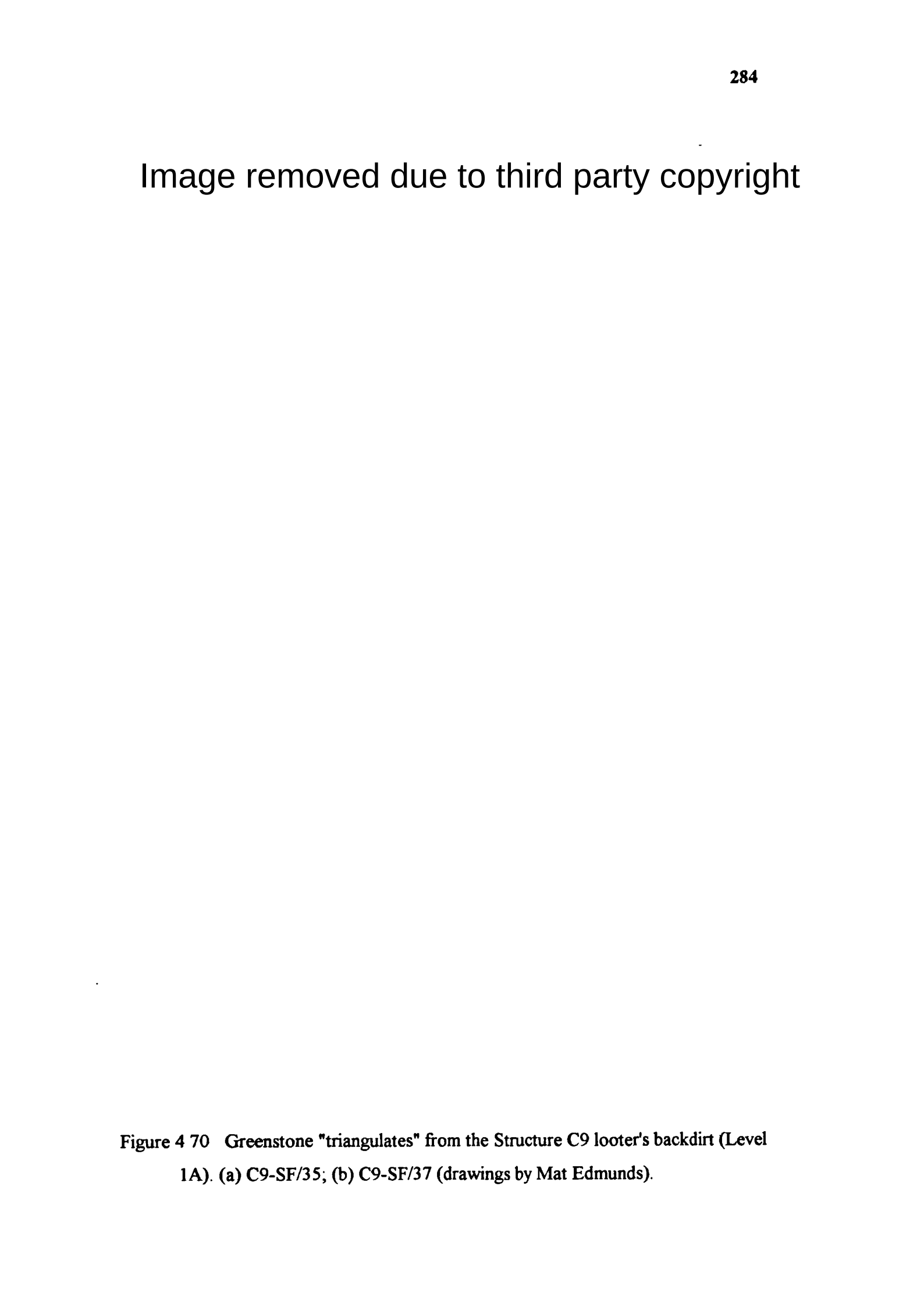


Figure 4 70 Greenstone "triangulates" from the Structure C9 looter's backdirt (Level 1A). (a) C9-SF/35; (b) C9-SF/37 (drawings by Mat Edmunds).

Figure 4.71. Greenstone "triangulates" from the Structure C9 looter's backdirt (Level 1A): (a) C9-SF/38, (b) C9-SF/39 (drawings by Mat Edmunds).

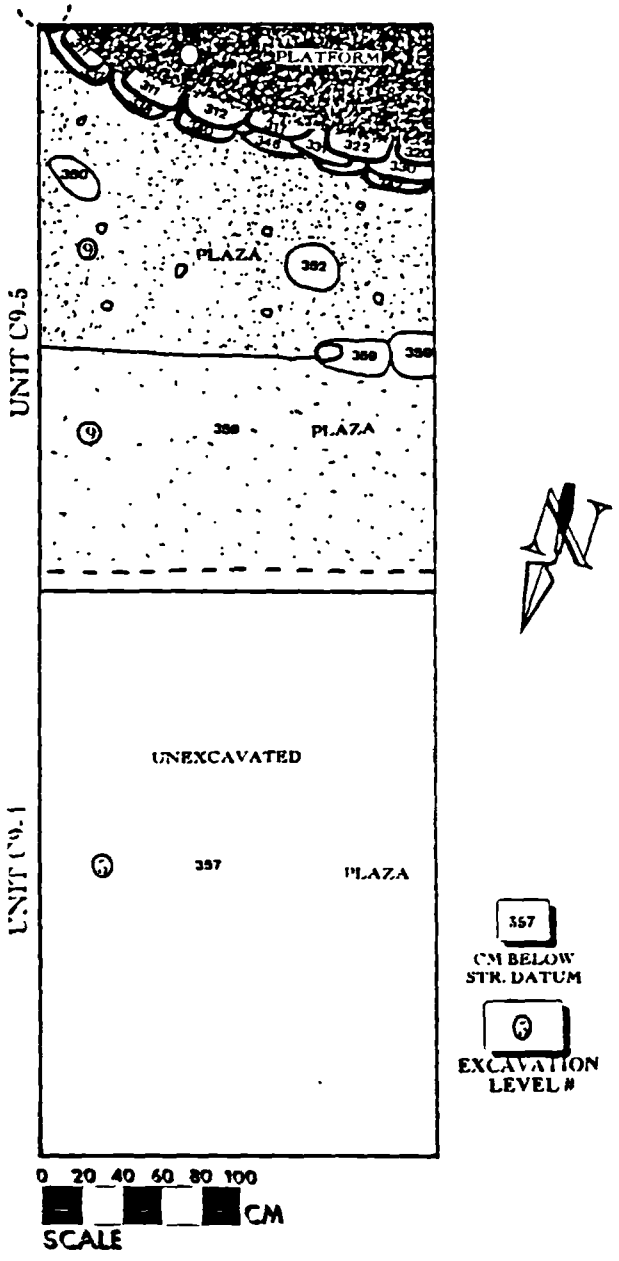


Figure 4.72. Top plan of Level 9 (C8-th).

section of the structure was exposed within Unit C9-5 (see Figures 4.66 and 4.72). The same horizontal surface was also isolated within the looter's trench, but only in a restricted area (see Figure 4 66). The platform, uncovered at ca. 312 cm Below the Structure Datum, exhibited a three course, curvilinear retaining wall of roughly-dressed, rectilinear limestone blocks (boulder size >25 6 cm, see Figure 4.72) These were on average 30 cm long and 8-10 cm thick. The course levels were separated by ca 5 cm thick layers of very dark, organic sediments. The platform was not plastered, although it would appear that a thin layer of tamped, grey-green clay may have been used to finish the surface. The architecture itself probably represents an apsidal platform of very simple construction. This postulation is suggested by the presence of analogous architecture within the Cahal Pech site core dating to the Cunil (1200-900 B.C.) and early facet Kanluk (900-650 B.C.) phases (see Awe 1992:205-210). These structures are contemporaneous with C9-8th (see below), and not only exhibit similar curvilinear frontal retaining walls, but also comparable construction techniques and materials. The limited architectural exposure inhibited our ability to assess whether a perishable superstructure had once surmounted the platform. Similarly, no solid evidence for post-holes or briquettes were discovered, indicative of a wattle-and-daub construction. Indications are, however, given the comparative architectural sample from the Cahal Pech site core, that a simple pole-and-thatch or wattle-and-daub construct did surmount the apsidal platform.

Overall preservation of the C9-8th architecture was good, especially considering the simplistic construction techniques and materials employed. The fill consisted of very dark, organic rich sediments. Compaction was high, and pebble (0.4-6.4 cm) content low to moderate. The platform was elevated ca. 41 cm above a "plaza" surface (at ca. 352 cm Below the Structure Datum). This latter deposit was comprised of the same dark, organic rich sediments, containing low to moderate percentages of pebble sized clasts (0 4-6.4 cm). Some thin, boulder sized (>25.6 cm) clasts were encountered at the "plaza" interface, indicating that they may have been employed as part of the original surface. However, their random nature argues against there having been an entirely "cobbled" sustaining surface. Due to the fact that this structure was discovered near the very end of the field season, time limitations prohibited us from excavating below the "plaza" level in Unit C9-5. Test excavations within the looter's trench, however, did

indicate that bedrock was situated at ca. 390 cm Below the Structure Datum, some 38 cm beneath our termination point in Unit C9-5.

Lithic debitage and faunal remains were recovered in moderate percentages within the platform matrix. One artefact of note, a figurine leg? (C9-SF/47) was also discovered. The ceramic sample was not overly large, and consisted entirely of early facet Kanluk phase types (900-650 B.C.). The assemblage was dominated by Savana Orange: Rejolla Variety sherds, an early facet member of the Savana Ceramic Group (Gifford 1976:62) . Also present were numerous varieties of the Jocote Ceramic Group, including representatives of the early facet Jocote Orange-brown: Ambergris Variety and Jocote Orange-brown: Jocote Variety (Gifford 1976:61-62). Other potential early facet Kanluk types present in the assemblage included Pital Cream: Varieties Unspecified (black exterior), and Chunhinta Black: Variety Unspecified (see Gifford 1976:62). Taken as a whole, the ceramic assemblage suggests an early facet Kanluk phase date of 900-650 B.C. for contruction of the C9-8th platform. Slightly earlier occupation of the site is possible given the presence of some potential Cunil phase (1200-900 B.C.) sherds, in particular a red slipped variety with a buff, ash tempered paste, possibly related to the Consejo Ceramic Group (see Awe 1992:227-230; Kosakowsky and Pring1991:62), and some brown and red-brown slipped varieties with grey paste. This earlier occupation was originally suggested following the recovery of a double strap handle during Level 9/C9-8th excavations in the Looter's trench. This is clearly a variety of the Swasey phase (1200-900 B.C.), Copetilla Ceramic Group, as defined at the Northern Belize site of Cuello (Kosakowsky and Pring 1991:62, see also Figure 3.28).

Level 8, C9-7th. Level 8, C9-7th, given its central location within the C9 mound, was again only partially exposed within Unit C9-5 (see Figures 4.66 and 4.73). A ca. 5 cm thick burnt plaster surface, representing the C9-7th upper platform, was also encountered during re-excavation of the looter's trench (at ca. 222 cm Below the Structure Datum; see Figure 4.66). Within Unit C9-5 a four course, ca. 44 cm high, curvilinear platform retaining wall was exposed (4 73). All indications are that C9-7th was also an apsidal structure. The top of the C9-7th building platform was encountered at ca. 308 cm Below the Structure Datum. The building platform retaining wall was composed of roughly-dressed, boulder sized (>25.6 cm) rectilinear limestone blocks. These were on average 28-30 cm long and ca. 8 cm thick. The course layers were separated by ca. 4 cm lenses of very dark, organic rich sediments. This wall was

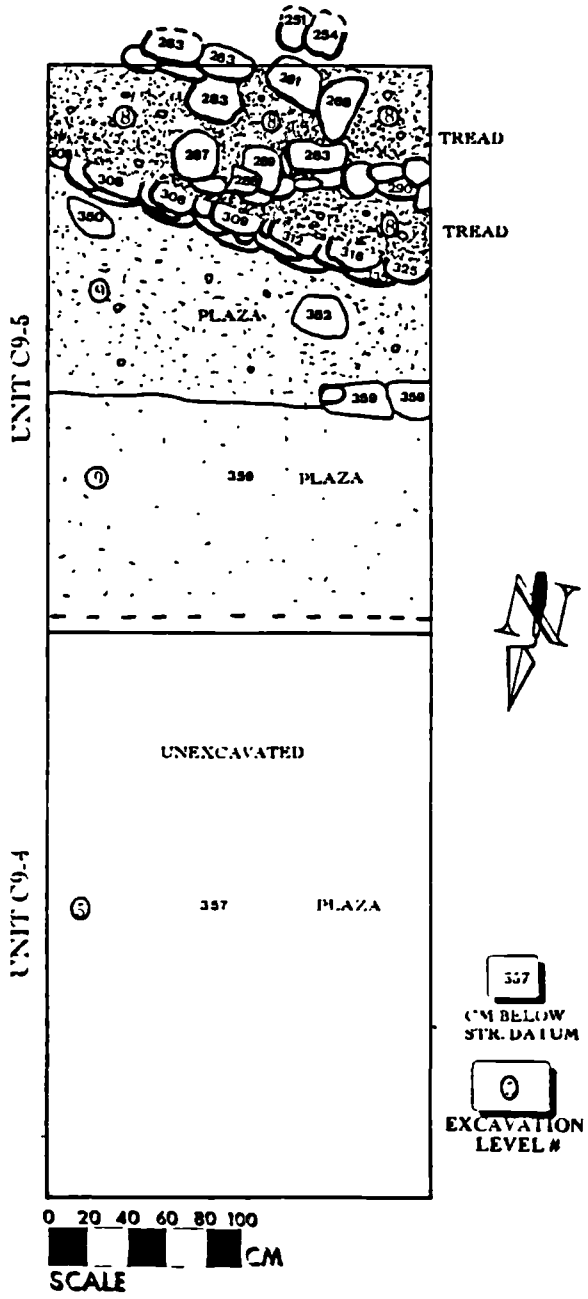


Figure 4 73 Top plan of Level 8 (C9-7th).

sustained by the earlier Level 9/C9-8th "plaza" surface at ca 352 cm Below the Structure Datum. To the south of the platform retaining wall a three course stair riser was exposed at ca. 283 cm Below the Structure Datum. This stair riser was oriented roughly east-west, and was straight rather than curved. The riser courses consisted of unshaped limestone blocks of boulder size (>25.6 cm). These courses averaged 6 cm in thickness, and were separated by ca. 3-4 cm of the same very dark, organic rich sediments. In reality, this riser, being ca. 25 cm in height, constituted the second step, the building platform itself (at ca. 308 cm Below the Structure Datum) functioning as the basal step.

Further to the south, the tread of the second step abutted the foot of what appeared to be the basal two courses of an apsidal terrace retaining wall. The top of this wall was encountered at ca. 261 cm Below the Structure Datum. Although only a small section of this wall was exposed, given that it was encountered near the southern terminus of Unit C9-5, its curvature would seem to match that of the building platform. The upper course of this wall was missing, although remnant cut-stones suggest that the terrace verge would have probably been situated at ca. 251 cm Below the Structure Datum. The previously discussed "rectangular step", located immediately to the north of the apsidal terrace, is clearly outset from this feature. It would appear that the surface of the apsidal terrace, at ca. 251 cm Below the Structure Datum, functioned as the final step leading to the upper C9-7th platform surface exposed within the looter's trench (at ca. 222 cm Below the Structure Datum). Whether the upper platform was apsidal or rectangular could not be determined, as its retaining wall was situated within the unexcavated safety balk.

In total, Structure C9-7th rose 130 cm above its associated "plaza" surface, and ca. 86 cm above its building platform surface. Due to the fact that the upper platform had been almost completely demolished by the looting activity, we could not ascertain whether any post-holes existed. Thus we were unable to determine if a pole-and-thatch or wattle-and-daub superstructure had surmounted the building platform. In general, architectural preservation was moderate to poor, with the exception of the building platform retaining wall and upper platform surface. The only evidence for preserved plaster was associated with the upper platform Fill was similar to that for Structure C9-8th, consisting primarily of moderately compact, very dark, organic rich sediments.

Figure 4,74. Figurine head (C9-SF/42) from Structure C9-7th (drawing by Nicholas Crow).

Pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) content was moderate to high, the fill deposit being generally coarser than that in C9-8th.

Lithic detritus and faunal remains were recovered in moderate percentages from the C9-7th fill. Significant artefacts included two figurine body fragments (C9-SF/14, C9-SF/43), a figurine head (C9-SF/42, Figure 4.74), a figurine leg (C9-SF/45), a barrel-shaped jadeite bead (C9-SF/21), a cylindrical jadeite bead (C9-SF/22), and a modified greenstone pebble (C9-SF/49). Ceramic sherds were present in moderate percentages, and all were members of the Kanluk Ceramic Complex (900-350 B.C.). The absence of earlier Cunil phase (1200-900 B.C.) sherds, the predominance of early facet Kanluk phase types (e.g. Savana Orange: Rejolla Variety, Jocote Orange-brown: Jocote Variety, Jocote Orange-brown: Ambergris Variety, and Chacchinic Red-on-orange-brown: Variety Unspecified), and the limited presence of late facet Kanluk sherds (e.g.Reforma Incised: Mucnal Variety, Joventud Red: Variety Unspecified, Black Rock Red: Black Rock Variety, and Palma Daub: Palma Variety), suggests a narrower date of 650-350 B.C. for the construction of C9-7th.

Level 7, C9-6th. Level 7, C9-6th, represents the earliest true, steep-sided pyramidal structure discovered at Zubin (see Figures 4.66 and 4.75). Within the looter's trench the 6-7 cm thick C9-6th upper platform surface was recognized within the wall sections at ca. 139 cm Below the Structure Datum (see Figure 4.66). This new upper platform had been raised ca. 83 cm above the corresponding C9-7th surface. Within Unit C9-5 the poorly preserved C9-6th axial stair was exposed (Figure 4.75). Indications are that the earlier Level 9/C9-8th "plaza" floor continued to act as the sustaining surface for this new architecture (at ca. 352 cm Below the Structure Datum). Given a plethora of dismantled stair risers, indications are that numerous C9-6th cut-stones had been reused during the subsequent Level 6/C9-5th construction. The entire C9-6th basal stair riser was missing. However, the evidence suggests that it was situated ca. 94 cm north of the earlier C9-7th building platform retaining wall. An elevation for the tread of this missing riser was provided by the presence of a remnant plaster turn-up, exposed at ca 340 cm Below the Structure Datum. This feature suggests that the original riser was ca. 20 cm high, with a corresponding ca. 36 cm deep tread.

A subsequent three course, ca. 26 cm high riser lead to the next stair tread at ca. 314 cm Below the Structure Datum. Again, a remnant plaster turn-up permitted the

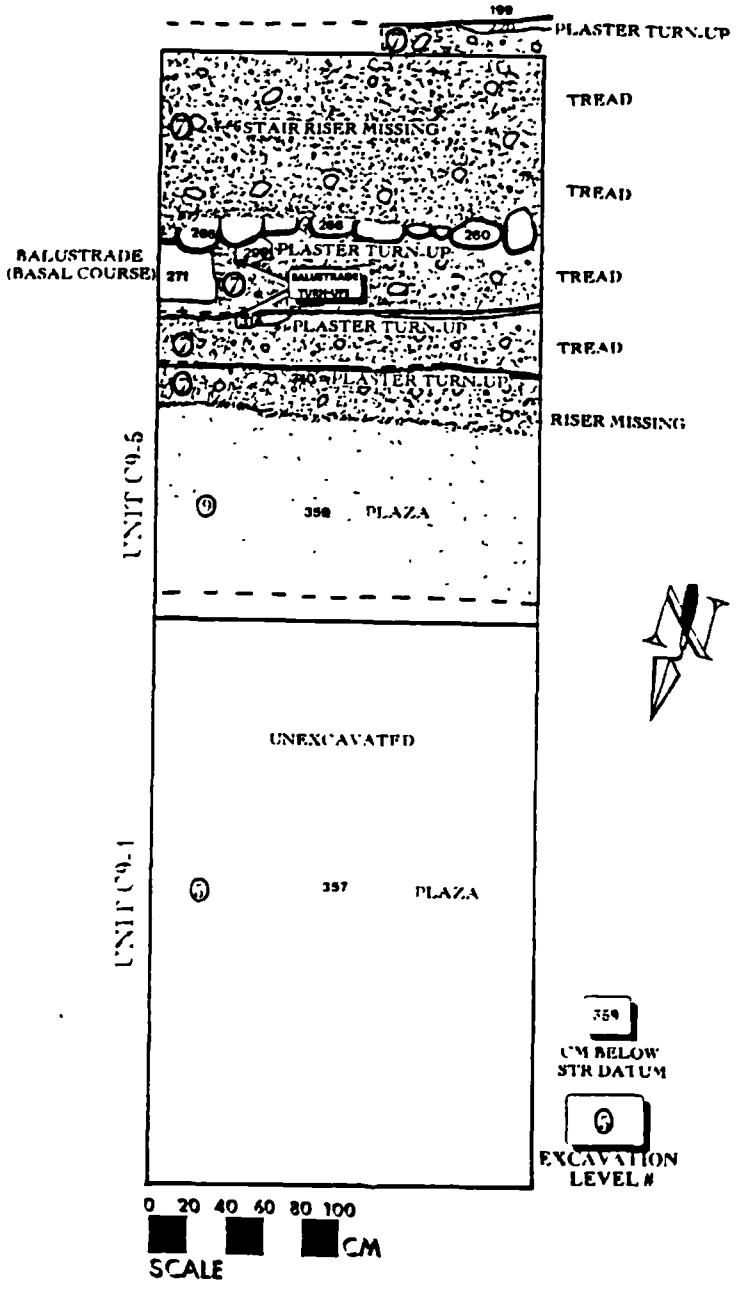


Figure 4.75. Top plan of Level 7 (C9-6th).

accurate reconstruction of this tread elevation. The three course riser consisted of roughly-dressed, rectilinear limestone blocks of boulder size (>25 6), averaging 7 cm thick and 28-30 cm long The course layers were separated by thin 2-3 cm lenses of light brown sediments. The tread itself was ca. 30 cm deep. A remnant plastered balustrade section was also isolated on the eastern section of the tread, adjacent to the stair riser (see Figure 4 75). The next riser was also of three course composition, although the courses were slightly narrower, being ca. 5 cm thick. Thin lenses of the light brown sediments were again found between the course levels This ca. 15-16 cm high riser lead to the next step, which was once again indicated by the presence of a preserved plaster turn-up at ca. 299 cm Below the Structure Datum. This stair tread was ca. 32 cm deep. A further preserved section of the balustrade, and the basal course of the same, were exposed on the eastern section of the tread. The following two stair risers and corresponding treads were incomplete. Indications are, however, that these steps originally exhibited ca. 20-25 cm high risers and ca. 30-40 cm deep treads. At the southern terminus of Unit C9-5 a final plastered turn-up was discovered at ca. 220 cm Below the Structure Datum. The associated plastered riser was ca. 21 cm high, and led to a tread surface at ca. 199 cm Below the Structure Datum. Due to the presence of the safety balk excavations terminated at this point. However, given the evidence, it seems likely that two further steps, ca. 30 cm high and ca. 30 cm deep, would have led to the upper platform at ca. 139 cm Below the Structure Datum. In total, Structure C9-6th rose ca. 213 cm above the "plaza" surface.

As was mentioned previously, with the exception of the plastered upper platform (which had been truncated by the looter's), and a few remnant plaster turn-ups and riser sections, C9-6th architecture was poorly preserved. This poor preservation was undoubtedly exacerbated by the apparent reuse of cut-stones for subsequent construction. The axial stair fill consisted of compact, light brown sediments with moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts. The platform fill was identical to this, with the addition of a ca. 30 cm thick basal layer of compact, very dark, organic rich sediments. This deposit contained moderate percentages of pebble (0.4-6.4 cm) and cobble (6 4-25 6 cm) sized clasts, and was considered finer in texture than the fill employed within the preceding C9-7th architecture.

Figure 4.76 Figurine body fragment (C9-SF 12; drawing by David Wheeler).

Figure 4.77 Figurine Head, "C8" Type (C9-SF/11; drawing by David Wheeler).

Lithic debitage and faunal remains were recovered in moderate percentages within the fill deposit. Significant artefacts from C9-6th consisted of four conch shell beads (C9-SF/17 [Figure 4.67c], C9-SF/18 [Figure 4 67d], C9-SF/19 [Figure 4 67e], C9-SF/20 [Figure 4.67f]), two greenstone triangulates (C9-SF/28), and three figurine body fragments (C9-SF/13, C9-SF/44, C9-SF/46) Two jadeite beads, resembling human teeth (C9-SF/24, C9-SF/25), were also discovered in the stair fill in close proximity to each other, suggesting intentional placement as a cache deposit. Similarly, a substantial figurine body fragment (C9-SF/12, Figure 4.76), and a large figurine head (C9-SF/11, Figure 4.77) were also discovered in an apparent cache-like arrangement, having been placed within the C9-6th fill, directly in front of the earlier C9-7th building platform retaining wall. The figurine head exhibits realistic facial features, a partially section of an elaborate head-dress, and large earspools. It is clearly related to the Middle Formative "C8" types defined at Chalcatzingo by Grove and Gillespie (1984). This type is found throughout the Maya lowlands (e.g. Hammond 1989), and is especially prevalent at nearby Cahal Pech (see Awe 1992: 282-286).

The ceramic sample recovered from C9-6th was relatively large, and dominated by Kanluk phase types (900-350 B.C.). Early facet Kanluk phase (900-650 B.C) varieties were prevalent, particularly sherds of the Savana Orange: Rejolla Variety. Other early facet Kanluk phase varieties represented in the assemblage were members of the Chunhinta Black: Variety Unspecified, and Jocote Orange-brown: Ambergris Variety. By far the most dominant variety in the sample was Jocote Orange-brown: Joctote Variety, a ceramic employed throughout the entire Kanluk phase. The inclusion of numerous late facet Kanluk phase (650-350 B C) sherds, particularly those epitomising the Savana Orange: Savana Variety, indicates that a late facet Kanluk phase date of 650-350 B.C. is highly likely for the construction of the C9-6th pyramidal mound. One burial (*C9-B 1*) was found in association with the C9-6th architecture (see Chapter 5).

Level 6, C9-5th. Level 6, C9-5th, represents a new, 250 cm high pyramidal structure (see Figure 4.66 and 4.78). Within the looter's trench the C9-5th upper platform surface was preserved in the wall sections (Figure 4 66) This plaster cap, the surface of which was exposed at ca 102 cm Below the Structure Datum, was ca. 5-6 cm thick. This overlay a ca 32 cm fill deposit of dry-stone core. Taken together, these architectural layers acted to raise the new C9-5th upper platform ca 37 cm above the

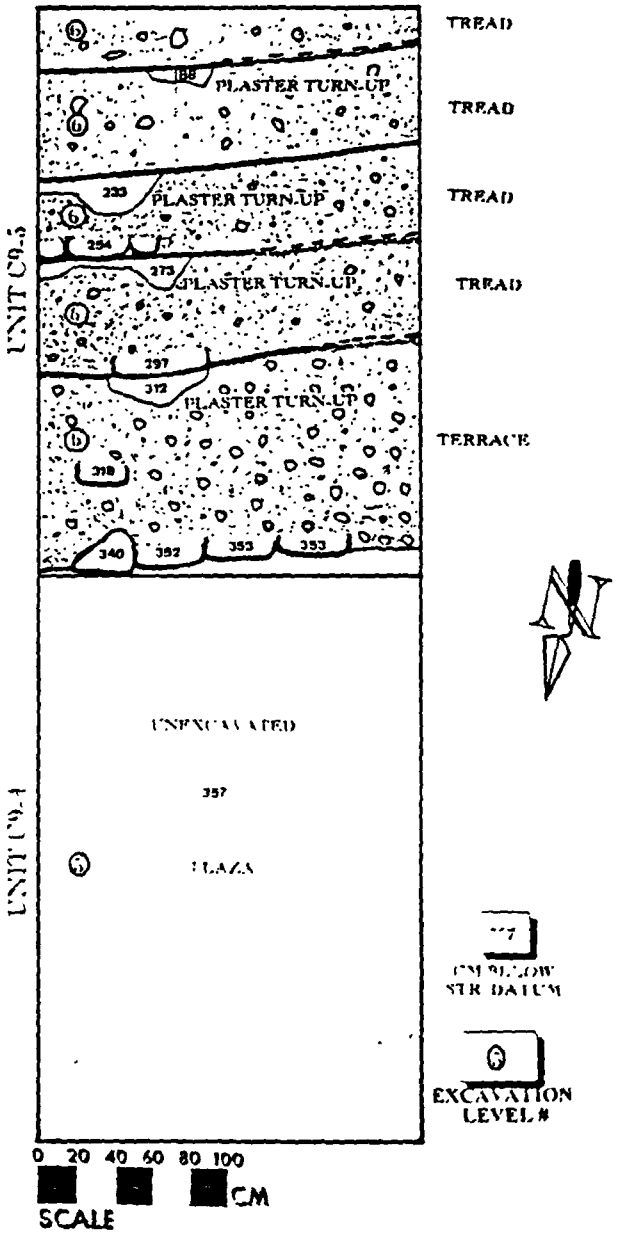


Figure 4.78. Top plan of Level 6 (C9-5th).

preceding C9-6th surface. Within Unit C9-5 the poorly preserved axial stair was exposed (Figure 4.78). Many of the stair risers had been completely dismantled As with the preceding structure, it would appear that numerous C9-5th cut-stones had been re-employed during the subsequent construction of C9-4th. Fortunately, the presence of some intact plaster turn-ups and tread sections permitted a fairly accurate reconstruction of the C9-5th architecture.

The structure's basal step, in the form of a terrace, had been extended ca. 100 cm to the north from its previous location in C9-6th. This was located right at the junction of Units C9-4 and C9-5. The riser was represented by the two basal courses, the upper course having been removed. The Level 9/C9-8th "plaza" surface continued to be employed as the sustaining surface for this new construction. The basal terrace elevation was indicated by the presence of an intact plaster tread at ca. 312 cm Below the Structure Datum. This implies that the riser was originally ca. 40 cm high. The terrace ran ca. 109 cm south, where it terminated with an intact plaster turn-up section and the plastered basal course of the next riser. The upper two riser courses of this step had again been dismantled for reuse. However, a plaster turn-up section at ca. 273 cm Below the Structure Datum indicated that the riser was originally 39 cm high. The tread itself was ca. 60 cm deep.

The next riser was again in extremely poor condition. A remnant portion of plaster tread and turn-up, exposed at ca. 233 cm Below the Structure Datum, implied that this step was originally 40 cm high. The tread itself was ca. 45 cm deep, and once again terminated at an incomplete stair riser. A small segment of plaster tread and turn-up, at ca. 188 cm Below the Structure Datum, testified that this step had originally been 45 cm high, with a corresponding ca. 54 cm deep tread. Due to the presence of the safety balk, excavators could not expose the architecture between this stair riser and the upper platform discovered within the looter's trench. Given the available evidence it is postulated that a ca. 45 cm high riser, a ca. 40-60 cm deep tread, and a final ca. 41 cm high riser, would have lead to the upper platform at ca. 102 cm Below the Structure Datum. Within Unit C9-5 the fill beneath the stair face was comprised of moderately compact, light brown sediments. Pebble (0.4-6.4 cm) and cobble (6.4-25 6 cm) sized clasts were prevalent within the matrix. At the junction of Unit C9-5 and the safety balk, the fill deposit changed to a dry-stone core, corresponding with that recognised within the upper platform in the looter's trench.

Figure 4.79. Greenstone "triangulates" from Structure C9. (a) C9-SF/27; (b) C9-SF/29 (drawings by Matt Edmunds).

Lithic debitage and faunal remains were recovered in moderate percentages within the C9-5th fill. Significant finds included a conch shell bead (C9-SF/15, Figure 4.67b) and a greenstone triangulate (C9-SF/29, Figure 4 79b). Ceramic sherds were present in moderate numbers within the fill deposit This assemblage was dominated by sherds of the Jocote Orange-brown: Jocote Variety, a ceramic found throughout the entire Kanluk phase (900-350 B C) Early facet Kanluk (900-650 B C.) varieties were also present in the assemblage, in particular sherds of the Savana Orange: Rejolla Variety. Late facet Kanluk phase (650-350 B.C.) varieties were equally well represented, especially members of the Savana Orange: Savana Variety. Given this assemblage, and the date for the preceding C9-6th architecture, a date of 650-350 B.C. is suggested for the construction of C9-5th.

Level 5, C9-4th. Level 5, C9-4th represents the next pyramidal structure constructed at the C9-locus (see Figures 4.66 and 4.80) This represents the best preserved C9 architecture, as a result of both superior construction techniques, and the fact that this structure was not dismantled for cut-stones during the subsequent C9-3rd construction phase. Within the looter's trench the C9-4th upper platform was isolated within the wall sections at ca. 65 cm Below the Structure Datum (Figure 4.66). The plaster cap was ca. 5 cm thick. This plaster surface was underlain by a ca. 35 cm thick fill deposit of "whitish", red-mottled small aggregate. Within this mortar matrix pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts were moderately abundant. In combination, these acted to raise the C9-4th platform ca. 37 cm above the corresponding C9-5th surface.

A large section of the C9-4th axial stair was exposed within Units C9-4 and C9-5 (Figure 4.80). The C9-4th basal step, again of terrace form, had been moved ca. 27 cm north of its previous C9-5th location. In conjunction with this the old Level 9/C9-8th "plaza" was resurfaced This plaster resurfacing was exposed within Unit C9-4 at ca. 357 cm Below the Structure Datum. The terrace surface was exposed at ca 329 cm Below the Structure datum, ca. 28 cm above the plaza surface. The tread was 68 cm deep. To the south a ca. 34 cm riser was encountered, with an associated tread surface at 295 cm Below the Structure datum. This step was relatively narrow, having a tread depth of 25 cm. The next riser was ca. 24 cm high. The associated tread, the top of which was at ca. 271 cm Below the Structure Datum, was 37 cm deep. A further ca. 40 cm high riser led to the next tread at 231 cm Below the Structure Datum. This tread was

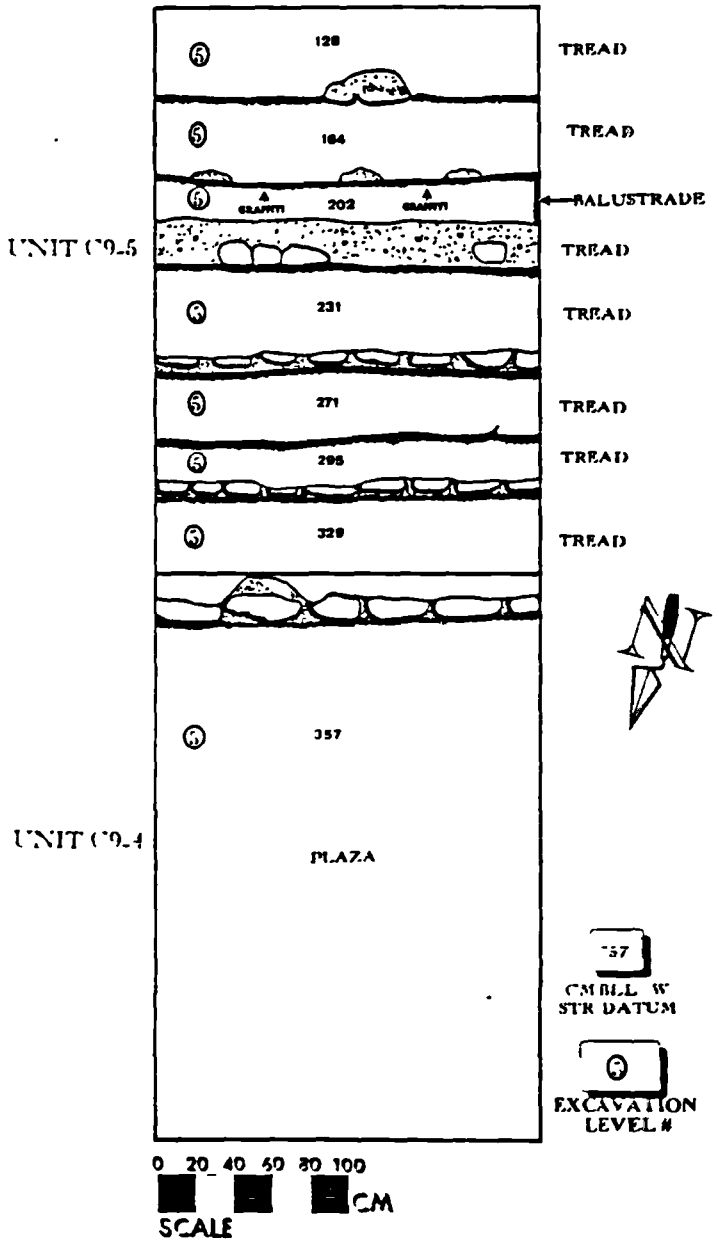


Figure 4.80. Top plan of Level 5 (C9-4th).

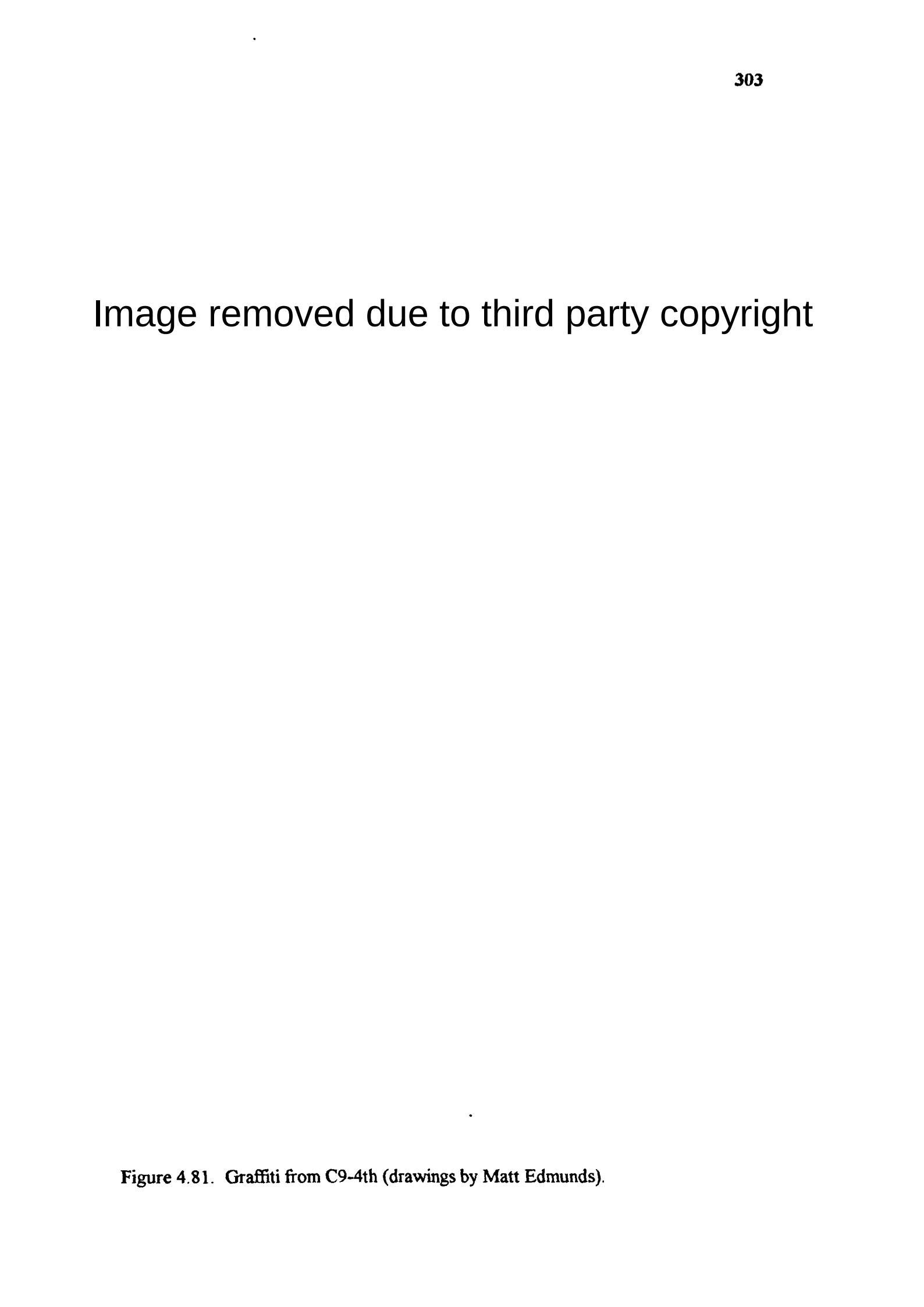


Figure 4.81. Graffiti from C9-4th (drawings by Matt Edmunds).

ca. 52 cm deep, and terminated at a ca. 29 cm high riser. The associated tread was exposed at 202 cm Below the Structure Datum. This ca. 46 cm deep tread led to a 38 cm riser.

Two highly weathered graffiti images had been incised into the plaster surface of this riser (see Figure 4.66). The eastern image represents a "grid", the western a "cross-like" form (see Figure 4.81). These representations clearly fit the pattern of entoptic graffiti images described for Tikal by Haviland and Haviland (1995). The tread supported by this riser was exposed at ca. 164 cm Below the Structure Datum. This tread was ca. 47 cm deep, and led to a further ca. 36 cm high riser. The final tread exposed within Unit C9-5 was encountered at ca. 128 cm Below the Structure Datum. The depth of this tread could not be determined with certainty given that the next riser was within the safety balk. Indication are, however, that one final step above this tread would have led to the C9-4th platform. In sum, the C9-4th upper platform was elevated ca. 292 cm above the "plaza" surface. The fill beneath the stairs corresponded to that recognised beneath the upper platform, being small aggregate. This deposit consisted of moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts interspersed within a mortar matrix. Stair risers were generally of three course construct. Individual courses were separated by thin lenses of the mortar.

Lithics and faunal remains were recovered in moderate percentages from the C9-4th fill. Significant finds included a conch shell bead (C9-SF/16, Figure 4.67a) and a greenstone triangulate (C9-SF/27, Figure 4.79a). Ceramic sherds were also present in moderate percentages. The assemblage was dominated by the late facet Kanluk phase (650-350 B.C.), Savana Orange: Savana Variety. Jocote Orange-brown: Jocote Variety, a ceramic employed throughout the entire Kanluk phase (900-350 B.C.) was also well represented. Also contained within this sample were a number of early facet Xakal phase (350 B C.-100 A D) varieties. These included representatives of the Sierra Red: Variety Unspecified, Flor Cream: Varieties Unspecified, and Polvero Black: Variety Unspecified. Taken as a whole, this ceramic assemblage suggests a date of 350 B.C.-100 A.D. for construction of C9-4th.

Level 4a, C9-3rd. Level 4a, C9-3rd, represents the next pyramidal structure erected at the C9 locus (see Figures 4.66 and 4.82). Remnants of the C9-3rd upper platform were exposed within the looter's trench wall sections at ca. 20 cm Below the Structure Datum (see Figure 4.66). The plastered floor surface was ca. 4-5 cm thick,

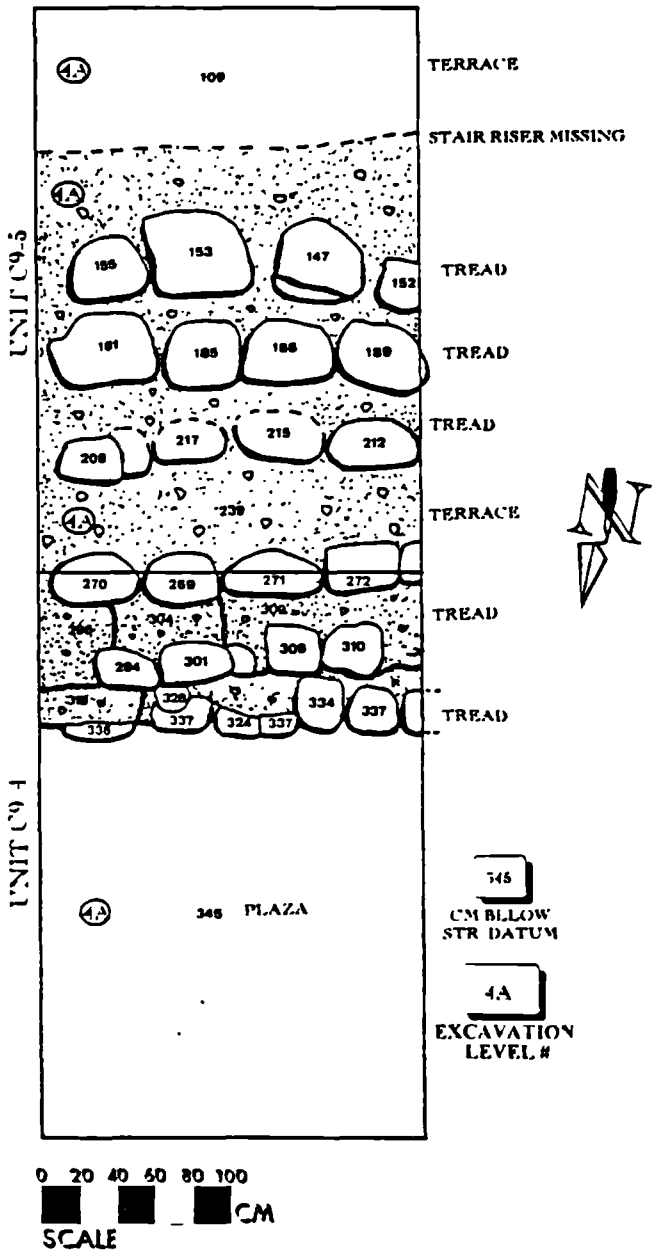


Figure 4 82. Top plan of Level 4a (C9-3rd).

and was underlain by a ca. 40 cm thick fill deposit. This was comprised of light greyish, small aggregate. The mortar matrix was relatively compact, and contained moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts. A large portion of the C9-3rd axial stair was exposed within Units C9-4 and C9-5. Due to its proximity to the surface, this stair exhibited poor preservation. Fortunately, the structural components that did remain permitted a fairly accurate reconstruction of the C9-3rd architecture (Figure 4.82).

In general, the stair risers appeared to have originally been of three course construction. The basal step had been extended ca. 68 cm north of its previous position in C9-4th. Only the basal course for this stair riser was still in place. The backing masonry beneath the tread, located at ca. 318 cm Below Structure Datum, suggested that this step was originally 27 cm high. This tread ran ca. 35 cm to the south, where it met a ca. 24 cm high riser. The tread for this step was again signified by a backing masonry deposit, exposed at ca. 294 cm Below the Structure Datum. This tread was ca. 40 cm deep. The next riser, again being poorly preserved, appears to have lead to a ca. 64 cm deep terrace step, the backing masonry of which was exposed at between ca. 269 and 239 cm below the structure datum. A further ca. 31 cm high riser led to the backing masonry for a new tread at ca. 208 cm Below the Structure Datum. The tread ran ca. 40 cm to the south, where a subsequent ca. 27 cm stair riser was located. This riser led to a further tread, represented by backing masonry, at ca. 181 cm Below the Structure Datum. The tread was ca. 50 cm deep, and terminated at a ca. 34 cm high riser. To the south of this it would appear that a further ca. 38 cm high riser, now missing, would have led to a moderately well preserved plastered terrace located at ca. 109 cm Below the Structure Datum. The safety balk inhibited further exposure of this terrace, but indications are that one or two further steps would have led to the upper platform at ca. 20 cm Below the Structure Datum. The backing masonry beneath the stair face was comparable to the fill recognised beneath the upper platform, consisting primarily of fairly compact, small aggregate, mainly light greyish mortar with moderate percentages of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts. In conjunction with the erection of the new C9-3rd pyramidal structure, a new "plaza" floor surface was laid down. This was exposed in Unit C9-4 at ca. 345 cm Below the Structure Datum. The plaster cap was ca. 5-6 cm thick, and was underlain by a ca. 6 cm thick ballast layer,

primarily pebble (0.4-6.4 cm) sized clasts. In total, Structure C9-3rd rose ca. 325 cm above the "plaza" surface.

Lithic debitage was recovered in small percentages from the fill deposit. Faunal remains were rare. No significant finds were discovered. The ceramic assemblage was small, and contained a number of sherds of the Jocote Orange-brown: Jocote Variety, a late facet Kanluk (650-350 B.C.) ceramic. The remainder of the assemblage was typical of the early facet Xakal phase (350 B.C.-100 A.D.), and was dominated by representatives of the Paila Unslipped: Varieties Unspecified. Taken as a whole, this assemblage suggests a date of 350 B.C.-100 A.D. for the construction of C9-3rd.

Level 4, C9-2nd. Level 4, C9-2nd, represents the penultimate C9 pyramidal architecture (see Figures 4.66 and 4.83). Structurally, C9-2nd constitutes a series of modifications to the preceding C9-3rd basal stair portion and "plaza" surface (see Figure 4.66). These structural alterations were exposed within Unit C9-4, and the northern extreme of Unit C9-5 (see Figure 4.83) . Portions of terrace sections were also exposed within the C9-2 and C9-3 test units (see Figure 4.84). The C9-2nd stair risers, when intact, were generally one course in construction. Treads were frequently represented by backing masonry, as plaster surfaces were rarely preserved. The basal step had been moved ca. 50 cm north of its previous location during the C9-3rd occupation. This riser was ca.15-20 cm high. The associated tread, exposed at ca. 319 cm Below the Structure Datum, consisted of a backing masonry deposit. This tread was ca. 30 cm deep, and terminated at a second ca. 26 cm high riser. The tread supported by this riser, uncovered at ca. 293 cm Below the Structure Datum, was again suggested by the presence of backing masonry. The tread itself was ca. 40 cm deep. The following riser was ca. 18 cm high, and led to a ca. 41 cm deep tread. This tread was again represented by the presence of a backing masonry deposit, exposed at ca. 275 cm Below the Structure Datum. This tread terminated at a final ca. 36 cm high riser, which led to a ca. 100 cm deep plastered terrace at ca. 239 cm Below the Structure Datum. South of this terrace the previous C9-3rd architectural features continued to be employed. In conjunction with these structural modifications to the basal stair section, the "plaza" surface, was raised ca. 11 cm above the previous C9-3rd elevation. The plaster cap, exposed at ca. 334 cm Below the Structure Datum, was ca. 5-6 cm thick, and was underlain by a ca. 5-6 cm ballast layer. This deposit was primarily composed of pebble (0 4-6.4 cm) sized clasts.

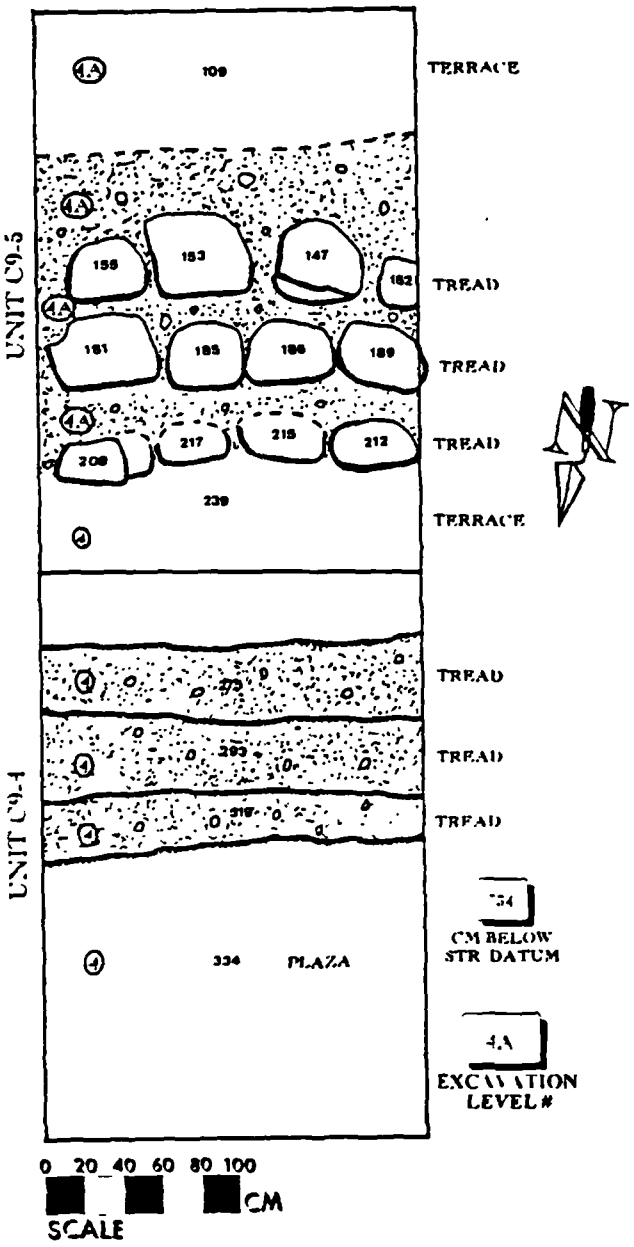


Figure 4 83. Top plan of Level 4 additions (C9-2nd).

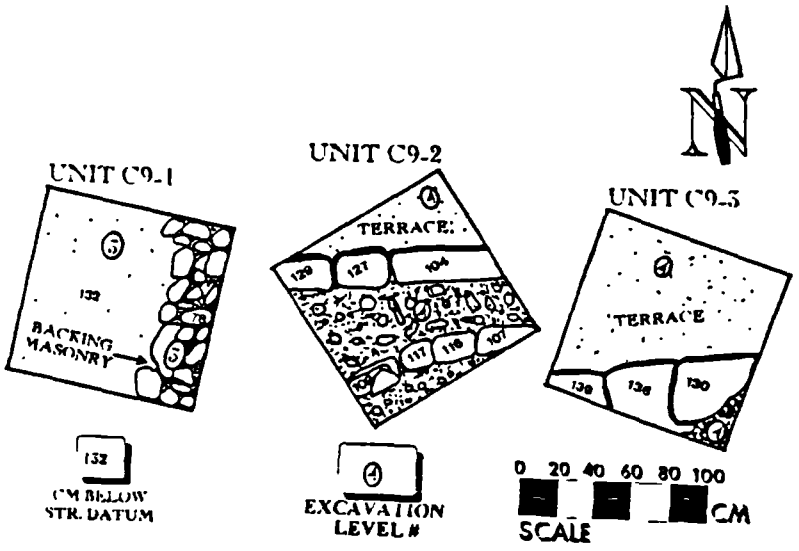


Figure 4 84. Top plan of the C9-2nd (C9-2, C9-3) and C9-1st (C9-1) architecture exposed within the C9 test units.

Due to the limited extent of these modifications, lithic debitage and faunal remains were rare. The only find of significance was a quartzite polishing stone (C9-SF/61), discovered in Unit C9-5. The ceramic sample was similarly limited, again reflecting the restricted nature of the modifications. The majority of sherds were indicative of the early facet Xakal phase (350 B.C.-100 A.D), although a number of late facet Kanluk phase (650-350 B.C.) types were also present. Representatives of the Paila Unslipped: Varieties Unspecified, an early facet Xakal phase variety, dominated the assemblage. This small sample suggests an early facet Xakal phase date of 350 B.C.-100 A D. for the C9-2nd structural modifications.

Level 3, C9-1st. Level 3, C9-1st, represents the terminal construction phase recognised at the C9 locus (see Figures 4.66 and 4.85). The upper platform surface was completely deteriorated, and therefore could not be isolated within the looter's trench wall sections. Portions of the C9-1st backing masonry were exposed within Units C9-1, C9-2, and C9-3 (see Figures 4.84). This was a small aggregate deposit, consisting primarily of pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts interspersed within a mortar matrix. A large segment of the poorly preserved axial stair, and moderately intact "plaza" floor, were uncovered within Units C9-4 and C9-5 (Figure 4.85). The "plaza" surface was exposed at ca. 318 cm Below the Structure Datum. A thin (1-4 cm thick) remnant of the plaster cap was still preserved. This was underlain by a ca. 10 cm thick ballast layer, primarily composed of pebble (0.4-6.4 cm) sized clasts. In total, this new "plaza" floor had been raised ca. 14-16 cm above the preceding C9-2nd surface.

The basal step, consisting of a ca. 34 cm high, one course riser, had been shifted 30 cm north from its previous C9-2nd location. The tread of this first step, represented by a backing masonry deposit exposed at ca. 281 cm Below the Structure Datum, was ca. 44 cm deep. A subsequent two course riser, ca. 25-30 cm in height, led to a terrace step at ca. 240 cm Below the Structure Datum. This terrace was ca. 166 cm deep, and still exhibited some sections of preserved plaster The stair risers and treads above this terrace were in extremely bad condition, reflecting their proximity to the surface and long exposure to the elements. In total, portions of four further steps where isolated within Unit C9-5. On average these appear to have originally had ca. 34 cm high, 2-3 course risers, and ca. 43 cm deep treads. The safety balk precluded any excavations north of the Unit C9-5 terminus. As was stated earlier, the upper platform was

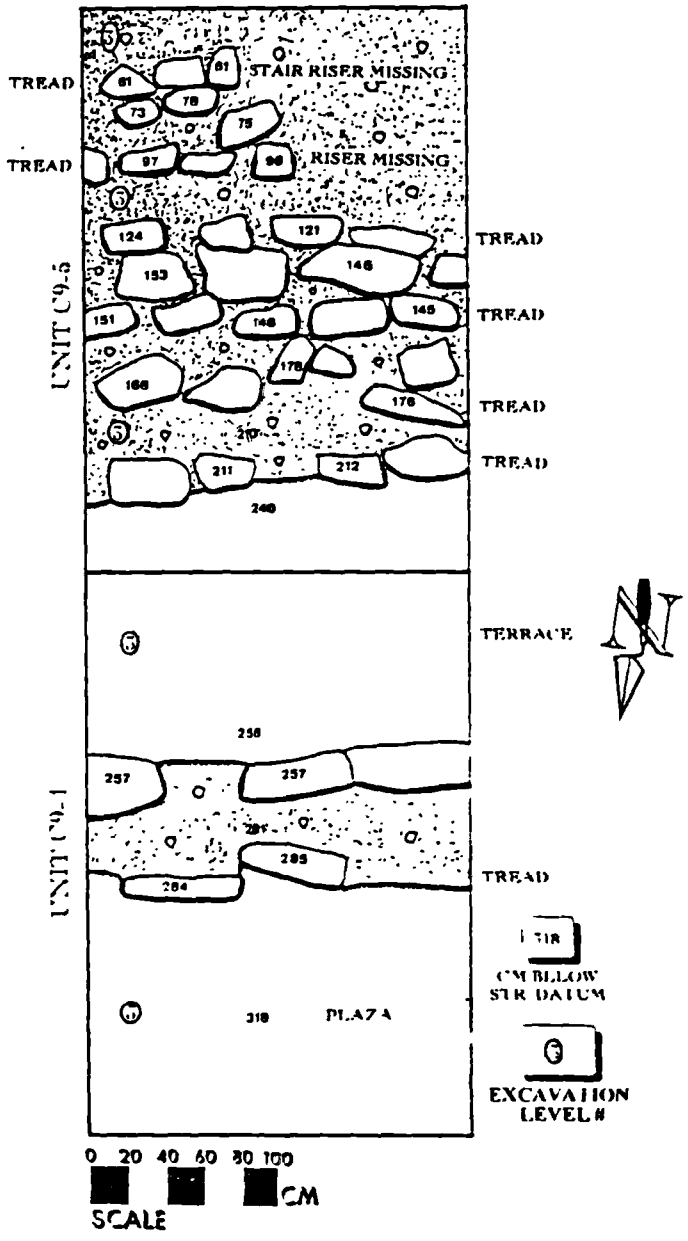


Figure 4.85. Top plan of Level 3 (C9-1st).

Figure 4 86. Groundstone artefacts from Structures C9 and D10. (a) syenite metate fragment (C9-SF/51); (b) granite metate fragment (D10-SF/8; drawings by Tina Christensen and Gyles Iannone)

completely deteriorated. Thus it was impossible to ascertain with any degree of certainty the actual height of the structure. However, indications are that C9-1st was a ca. 320 cm high, steep-sided pyramidal structure.

Lithic debitage and faunal remains were recovered in moderate percentages from the C9-1st fill. The only significant find was a syenite metate fragment (C9-SF/51, Figure 4.86a). The ceramic sample was small, and consisted entirely of Xakal phase (350 B.C.-350 A.D.) varieties. Sierra Red: Variety Unspecified, and Polvero Black: Variety Unspecified, two ceramics employed throughout the Xakal phase, were present in moderate numbers. Some late facet Xakal phase (100-350 A.D.) sherds, representing the Old River Unslipped: Old River Variety, and Aguacate Orange: Aguacate Variety, were also present. The inclusion of these sherds in the sample, and the absence of Ahcabnal phase (350-600 A.D.) varieties, implies that a date of 100-350 A.D. is likely for the construction of C9-1st.

Level 2. Level 2, a fall deposit, was excavated within Units C9-1, C9-2, C9-3, C9-4, and C9-5 (Figure 4.66). This loose to moderately compact deposit was formed through the destabilisation, collapse, and subsequent downward movement of structural features. Pebble (0.4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts were prominent within the matrix. The deposit varied in thickness, generally being between 40-60 cm thick. Towards the upper portion of the structure (Unit C9-5) it became more difficult to separate this deposit from the comparably less coarse, surface/humus layer (Level 1). This was due to the overall thinness of the surface/humus layer in this area, and the consistent "interfingering" of the two deposits. Due to these factors, in many instances Levels 1 and 2 had to be removed in combination.

Lithics and faunal remains were rare in the fall deposit. The ceramic assemblage was small, and highly weathered. This sherd sample was obviously mixed, due to the formation processes involved in the deposition of the fall deposit, as well as the addition of sediments and associated sherds produced during looting activity. The majority of sherds were Formative period types. Some Classic period sherds were also present, although given the more pristine ceramic samples obtained from the intact construction levels, it is likely that these result from site occupation post-dating C9-1st construction. Significant artefacts recovered from the Level 2 fall deposit included a medial section of obsidian blade (C9-SF/8), found in Unit C9-2, and a proximal section of obsidian blade (C9-SF/9), a chert scraper (C9-SF/55), and fragment of a chert macroblade stem

(C9-SF/60), all from Unit C9-4. Excavations within the mixed Level 1 (surface/humus) and Level 2 (fall) sediments in Unit C9-5 produced a slate pendant (C9-SF/10), a broken slate disk (C9-SF/56), a chert biface preform discard (C9-SF/57), and a bifacial chert chopper (C9-SF/58).

Level 1. Level 1, the surface/humus deposit, consisted of loose to moderately compact organic sediments (Figure 4.66). Pebble (0 4-6.4 cm) and cobble (6.4-25.6 cm) sized clasts were prevalent, as were roots and rootlets. This deposit formed through the general stabilisation and accumulation of sediments above the undulating surface of the fall deposit (Level 2). Lithics and faunal remains were rare. The ceramic sample was small, and as with the previously discussed fall deposit, was of mixed origin. The majority of sherds were again representative of the Formative period. The small percentage of Classic period sherds undoubtedly result from site occupation post-dating the construction of C9-1st. The only significant find, recovered from Unit C9-4, was a chert biface preform (C9-SF/59).

In summary, Structure C9 proved to have been an important shrine feature throughout the Formative period. In fact, this shrine was the likely focus for the majority of Middle Formative (Kanluk phase: 900-350 B.C.) ritual activity at the site, and probably continued to play a significant ritual function until near the end of the late Xakal phase (100-350 A.D.). However, even with the shift in emphasis towards the *Ac* Courtyard and the Structure A1 shrine, which probably began in the early Xakal phase (350 B.C.-100 A.D.), and culminated in the Late Xakal phase (100-350 A.D.), Structure C9 more than likely persisted as an important symbolic focus at Zubin until site abandonment (ca. 875 A.D.).

SUMMARY

This chapter has outlined the various architectural sequences for the site, from initial construction during in the early facet Kanluk phase (900-650 B.C.), to abandonment in the late facet Maxik phase (750-875 A.D.). This roughly 1800 year construction sequence is summarised in Figure 4 87 The following chapter discusses the excavation of cache and burial deposits (Chapter 5). The general temporal and contextual trends reflected in the material culture assemblage are presented in Appendix

III. In combination, these three data bases provide the basis for the social interpretations which will be presented in the forthcoming analysis chapter (Chapter 6)

EXCAVATIONS WITHIN THE ZUBIN PERIPHERY

In conjunction with the previously outlined site core operations, which are the focus of this dissertation, crew members also initiated a circumscribed program of test excavations within the Zubin periphery. Unfortunately, the limits of the present dissertation rule out detailed discussion of these operations. To summarise, these collateral explorations aimed to acquire an understanding of the growth of these groups, the construction methods employed, the degree of structural elaboration, the location and contents of ritual deposits, and the nature of material culture inventories. With these goals in mind, structural testing was conducted within Group D or *Danta* (Tapir), located 50 m to the east (Sunahara 1993), Group E or *Ek-pay* (Black Skunk), located 107 m to the northeast (Christensen 1995), and Group F or *Familia* (Family), situated roughly 200 m to the northeast (Stevens and Ford 1995; see Figure 3.6). In addition to these test excavations, a number of peripheral structures were also explored via looter's trenches. Importantly, none of these peripheral investigations produced data suggestive of residential occupation prior to the early Maxik phase (675-750 A.D.). This is consistent with what is known for the site core, as it is well into the Late Classic period before the first *undeniable* domestic structures (Structures A4 and B8) were erected there. Thus, little *tangible* evidence exists for *residential* occupation, either within the Zubin site core or periphery, before the onset of the Early Maxik phase (675-750 A.D).

Efforts also focused on testing some of the special features within the periphery. The goal of these operations was to assess function and determine temporal construction sequences. One reservoir, adjacent to the *Familia* Group, was examined (Operation 100; see Stevens and Ford 1995), as was one *chultun* (Chultun 1, Operation 101; see Iannone 1994a:98-104), situated ca. 85 m east of the main group (see Figure 3.6). Both of these features were dated to the late Maxik phase (750-875 A D). That these domestic facilities were constructed at this late date once again suggests that the vast majority of *residential* settlement, both within the Zubin site core and periphery, was established within the latter part of the Late Classic period.

PERIOD AND CERAMIC PHASE	DATE (11.16.0.0.0 COR.)	STRUCTURE#/CONSTRUCTION PHASE "CLUSTERS"		TYPE OF CONSTRUCTION	RITUAL FEATURE	OTHER FEATURE
CLASSIC			B6-1ST	BUILDING (NO SUBSTRUCTURE)		
LATE FACET MAXIK	750-875 A.D.	A2-1 (LEVEL 2) A2-1 (LEVEL 3) B6-2ND B8-1ST D10-1ST, D11-1ST E12-1ST F14-1ST, F14-2ND		STAIR RAISED PLATFORM BUILDING (NO SUBSTRUCTURE) BUILDING PLATFORM BUILDING PLATFORMS BUILDING PLATFORM BUILDING PLATFORMS	CACHE A2-F/1	CHULTUN 1 RESERVOIR (FAMILIA GROUP)
EARLY FACET MAXIK	675-750 A.D.	A1-1ST A1-1 (LEVEL 2) A4-1ST, A4-2ND, A4-3RD, A4-4TH, A4-5TH, A4-6TH B6-3RD, B6-4TH B8-2ND, B8-3RD E12-2ND F14-2 (LEVEL 4)		PYRAMIDAL STRUCTURE PYRAMIDAL STRUCTURE BUILDING PLATFORMS BUILDINGS (NO SUBSTRUCTURES) BUILDING PLATFORMS BUILDING PLATFORM RAISED PLATFORM	BURIAL A1-B/1 BURIAL A1-B/2 BURIAL A1-B 3 BURIAL A1-B 4 BURIAL A1 B/5 BURIAL E12-B 1 CACHE A1 F/1 CACHE A4-F/1 CACHE A4-F/2 CACHE A4-F/3	
		A1-2ND A1-1 (LEVEL 3), AP-1 (LEVEL 2) A3-1ST A3-2ND A4-7TH A4-1A (LEVEL 6B,6C)		PYRAMIDAL STRUCTURE RAISED PLATFORM PYRAMIDAL STRUCTURE PYRAMIDAL STRUCTURE BUILDING PLATFORM EXTENSION RAISED PLATFORM	BURIAL A1 B/6 BURIAL A1 B 7 BURIAL A1 B 8	CHULTUN 2 (STR. E12)
		A4-1A (LEVEL 6F,6D), A4-3 (LEVEL 5A)	A4-6TH	BULDING PLATFORM RAISED PLATFORM	BURIAL A1-B/12 CACHE A4-F 4	
XNIPEK	600-675 A.D.	A4-1A & A4-2A (LEVEL 7), A4-3 (LEVEL 6, 6B)	A3-3RD	PYRAMIDAL STRUCTURE TAMPED EARTH FLOOR	BURIAL A1-B/11 CACHE A4-F/5	
AHCABNAL	350-600 A.D.		A3-4TH	PYRAMIDAL STRUCTURE	BURIAL A1-B/13	
FORMATIVE		A1-3RD A3-5TH A1-1 (LEVEL 4), A4-2A (LEVEL 8,8A)		PYRAMIDAL STRUCTURE PYRAMIDAL STRUCTURE RAISED PLATFORM	BURIAL A1-B/9 BURIAL A1-B/10	
LATE FACET XAKAL	100-350 A.D.	C9-1ST C9-4 (LEVEL 3)		PYRAMIDAL STRUCTURE RAISED PLATFORM		
		A4-2A (LEVEL 9) C9-2ND C9-4 (LEVEL 4)		PLASTER FLOOR PYRAMIDAL STRUCTURE RAISED PLATFORM		
EARLY FACET XAKAL	350 B.C.-100 A.D.	C9-3RD C9-4 (LEVEL 4A)		PYRAMIDAL STRUCTURE RAISED PLATFORM		
		A1-4TH A1-1 (LEVEL 5), AP-1A (LEVEL 3 A4-2A (LEVEL 10A, 10B) C9-4TH C9-4 (LEVEL 5)		PYRAMIDAL STRUCTURE RAISED PLATFORM PLASTER FLOOR PYRAMIDAL STRUCTURE RAISED PLATFORM	CACHE A1-F/2	
LATE FACET KANLUK	650-350 B.C.	A1-1 (LEVEL 6), A1-4 (LEVEL 6), AP-1 (LEVEL 4) A2-1 (LEVEL 4), B8-2A (LEVEL 6) A1-4 (LEVEL 7A)		RAISED PLATFORM RAISED PLATFORM TAMPED EARTH FLOOR		
			C9-5TH	PYRAMIDAL STRUCTURE		
			C9-6TH	PYRAMIDAL STRUCTURE	BURIAL C9-B/1	
			C9-7TH	APSIDAL STRUCTURE		
EARLY FACET KANLUK	900-650 B.C.		C9-8TH	APSIDAL STRUCTURE		

Figure 4.87 The Zubin construction sequence.

CHAPTER 5

EXCAVATION DATA II: ZUBIN SPECIAL DEPOSITS (CACHE AND BURIAL FEATURES)

This chapter provides a detailed discussion of the various special deposits recovered during excavations within the Zubin site core and its periphery. Classification of these features follows the scheme developed by Welsh (1988), and a broader construct previously presented by the author (Iannone 1992; see also Appendix II). These features, consisting of either caches or burials, constitute evidence for ritual activity spanning almost the entire occupation of the site.

CACHES AND BURIALS FROM STRUCTURE A1

Level 5, A1-4th

Cache A1-F 2. Cache A1-F/2, a termination cache, was found within the Level 5 ballast deposit, near the western extreme of Unit A1-4 (see Figure 4.4). This cache, situated ca. 5.15 m below the unit datum, consisted of a cluster of broken pottery. The majority of the sherds (14) belonged to a single Sampopero Red/Sierra Red transitional vessel. Other sherds included singular representatives of the Middle Formative, Kanluk phase (900-350 B.C.) Savana and Jocote Ceramic Groups, and Late Formative, Xakal phase (350 B.C.-350 A.D.) Flor, Sierra, and Sapote Ceramic Groups. This assemblage reaffirms the 350 B.C.-100 A.D. date already outlined for the construction of the Level 5 plaza floor. The cache probably represents a termination offering focusing on the earlier Level 6 floor.

Level 4, A1-3rd

Burial A1-B 9 Burial A1-B/9, classified as a simple crypt following Welsh (1988), was encountered in Unit A1-2 at ca 4.92 m below the trench datum (see Figure 4.3). This axially aligned interment had been placed during the construction of the A1-3rd platform. The grave itself was oriented approximately north-south, and consisted primarily of a small chamber formed by roughly cut limestone uprights covered

by a layer of similarly unelaborate capstones (see Figure 4 6) Above this chamber more rough-cut limestone slabs had been used to cover the grave proper. Due to the weight of this overlying mass of stones a number of the capstones had collapsed, although indications are that the chamber was originally ca. 40-50 cm in height, ca. 190 cm in length, and ca. 40-50 cm wide. The bottom of the interment was encountered at ca. 5.62 m below the trench datum. The interred individual was moderate to poorly preserved, due primarily to the aerobic conditions of the open chamber (Figure 5.1). An area containing numerous cranial fragments and teeth was isolated, as were sections of many of the other major bones. The distribution of these remains suggest that the individual had been placed in an extended, supine position, with arms at the side and head to the south. Subsequent osteological analysis indicated that the individual was 27-40 years of age. The preservation of the remains prohibited determination of gender. Six inlayed teeth were recovered, all classifiable as Romero's (1958) E1 type. These included a maxillary right central incisor exhibiting a jadeite inlay (A1-SF/260), a maxillary right canine exhibiting a hematite inlay (A1-SF/261), a maxillary left canine exhibiting a hematite inlay (A1-SF/262), a maxillary left central incisor exhibiting an empty drill hole (A1-SF/263), a mandibular left first premolar exhibiting a hematite inlay (A1-SF/264), and a mandibular right first premolar exhibiting an empty drill hole (A1-SF/265).

Grave goods were relatively abundant, and were recovered from outside as well as inside the simple crypt. One section of incised deer metapodial (*Mazama americana;* A1-SF/226*)*, and a similar incised avian long bone (A1-SF/227), possibly from a turkey, were discovered on top of the capstones covering the grave. Also recovered from outside of the chamber proper was a small bowl (A1-SF/248) with slightly flaring sides (Figure 5.2). This vessel was located immediately outside of and adjacent to the western uprights. At some point this bowl had been broken, although we could not determine if this was done at the time of deposition or not. Given the vast amount of rubble that overlay the sherds, it seems likely that the weight of this overburden was at least partially responsible for the breakage. Reassembly indicated that this vessel was of no known type reported in the major ceramic volumes, although its mottled red-brown slip is suggestive of the Ahcabnal phase Pucte Ceramic Group (Early Classic, 350-600 A D.). An appliqué depiction present on one side of the vessel was originally identified by Wendy Ashmore (personal communication 1993) as "The Jaguar God of the Underworld". Subsequent research seemed to uphold this identification. Schele and Miller (1986:50) have outlined that GIII as Jaguar God of the Underworld, is

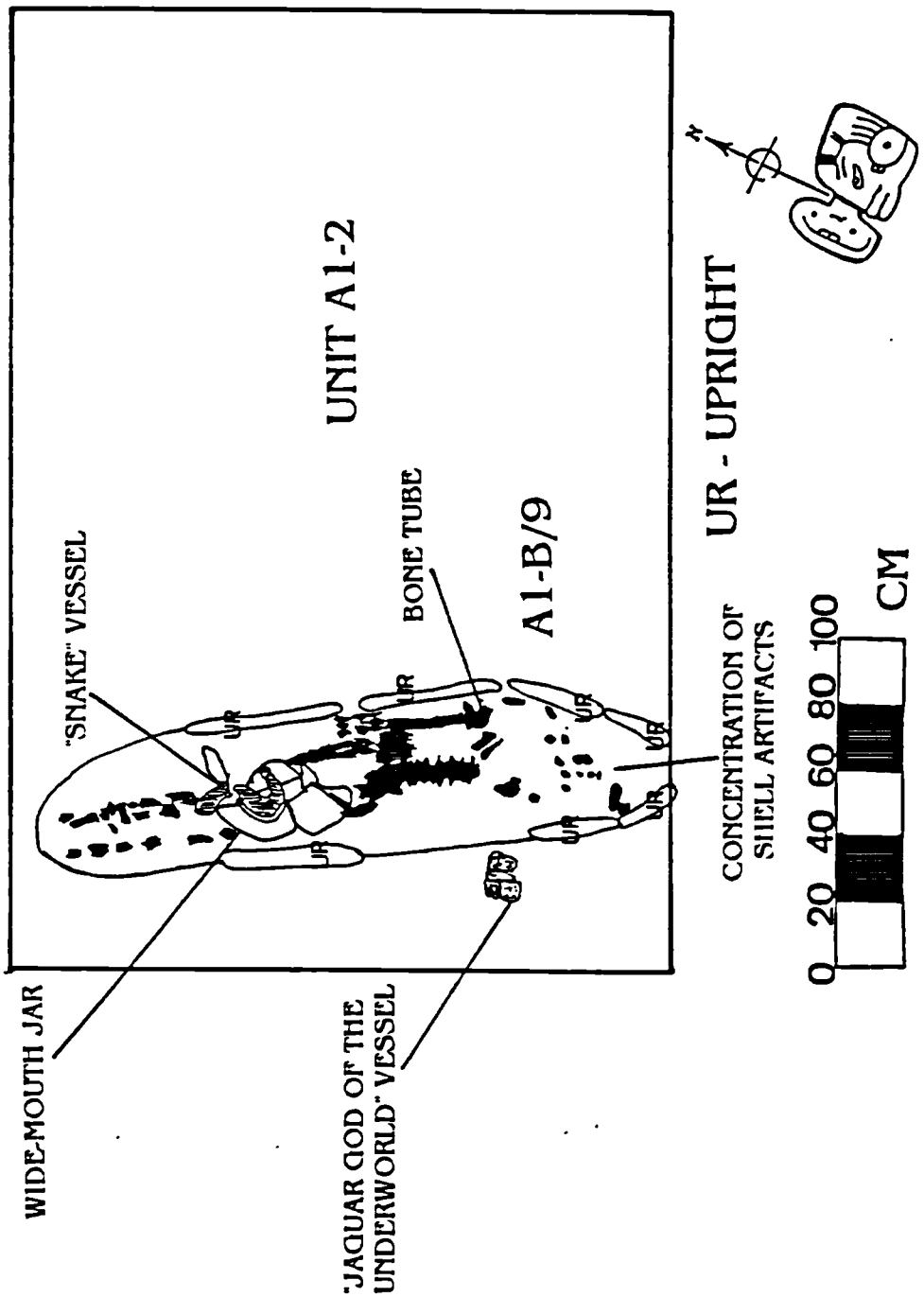


Figure 5.1. Top plan of Burial A1-B/9.

Figure 5.2. Jaguar God of the Underworld bowl from Burial A1-B/9 (A1-SF/248, drawing by Barry Ford)

characterised by the presence of a "Roman nose", spiral eyes extending "upward from the lower lid", and especially "a twisted device, called a 'cruller'...placed between and under his eyes" (Figure 5.3) All of these criteria are satisfied by the Zubin vessel. In contrast, according to Schele and Miller, this god usually exhibits a pointed front tooth, whereas the Zubin example has a protruding, funnel-shaped mouth. It is thus possible that this is a special representation of this deity (see below)

The Jaguar God of the Underworld is the most common portrayal on Late Classic incensarios (see Schele and Miller 1986:50). This is intriguing, given other characteristics of the vessel Upon reconstruction it was noted that a permanent cover had once enclosed almost the entire orifice of the bowl (Figure 5.2). This cover did not join with the rim proper, but was situated slightly lower, running into the vessel wall. While the clay was still wet vertical perforations had been made into the cover at the juncture with the wall. These perforations were found around almost the entire circumference of the cover/wall interface. The only location where these perforations did not exist was directly opposite from the actual facial representation. In this area a smooth section was present, implying that this was the locus for pouring substances. The slip ran down the inside of the vessel wall to the juncture with the cover, where it appears to have then ran over the cover itself. Beneath the wall/cover intersection (i.e., within the interior of the bowl), the vessel was unslipped, exhibiting a bright orange-red paste with large calcium carbonate inclusions. Of particular interest is that this cover had been removed prior to deposition, as if to obtain something originally contained within the vessel, something too large to have been removed through the pouring "spout". Taking all this into consideration, the Zubin vessel seems like a possible Late Preclassic/Early Classic precursor to the Late Classic censors.

Within the confines of the simple crypt two more vessels were discovered. Both had been broken during the collapse of the capstones. One vessel was a large jar (A1-SF/246) with a slightly outflared neck (Figure 5.4). Its mottled red-brown slip and orange-red paste duplicates that of the "Jaguar God of the Underworld" vessel. Although no exact equivalent of this vessel could be found in the ceramic reports, its slip does seem similar to that of the Ahcabnal phase (350-600 A D.), Pucte Ceramic Group. Formally, it is suggestive of some transitional Late Preclassic/Early Classic jars, primarily those in the Pucte, Fowler and Aguila Ceramic Groups (see Culbert 1993: Figures 21-k, 25-g, 28-b1; Gifford 1976 Figures 80-l, 90-1, 91-j; Hammond 1984. Figure 3, Vessel 19). This jar had been placed upright in the interment, covering the knees of the

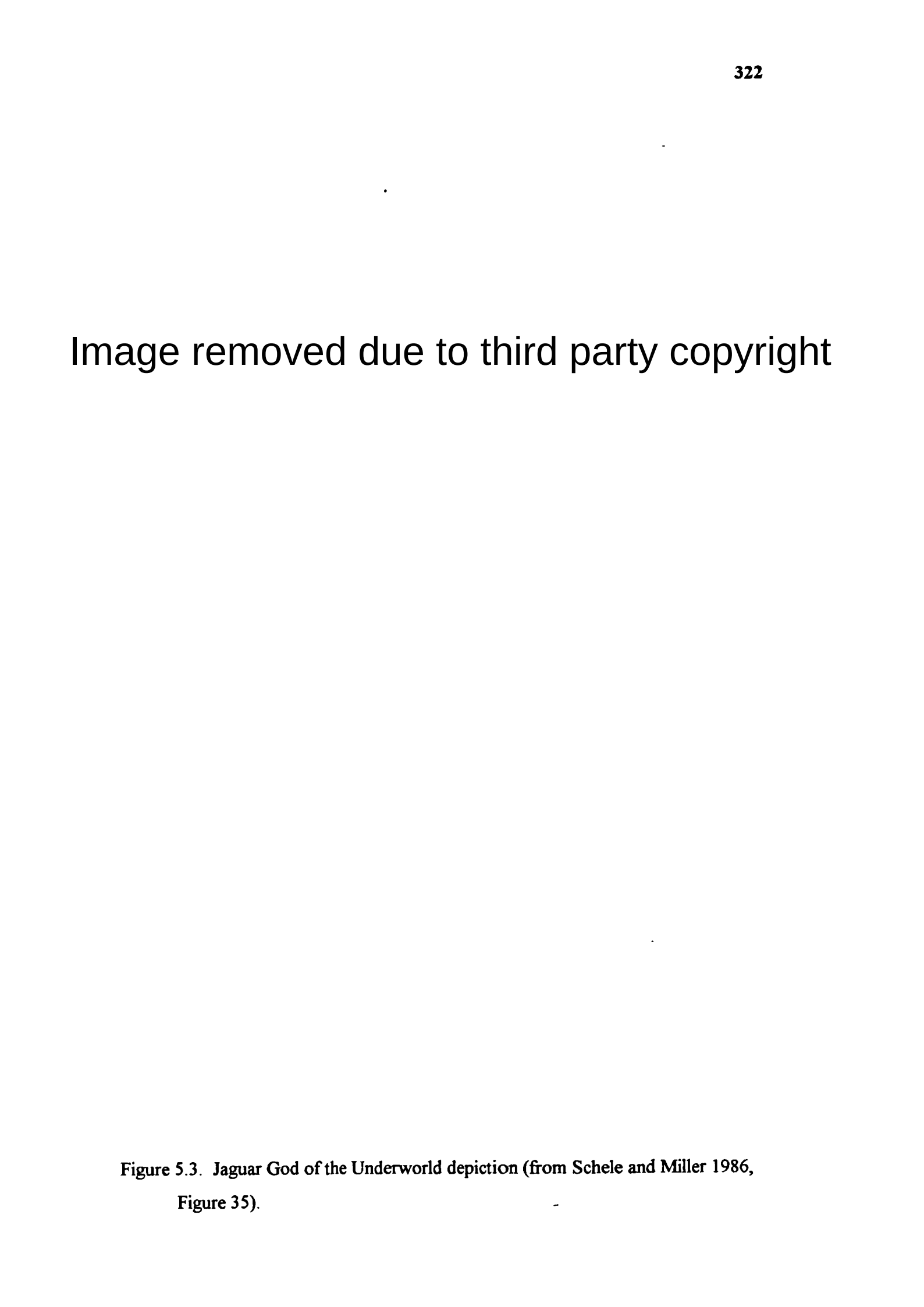


Figure 5.3. Jaguar God of the Underworld depiction (from Schele and Miller 1986, Figure 35).

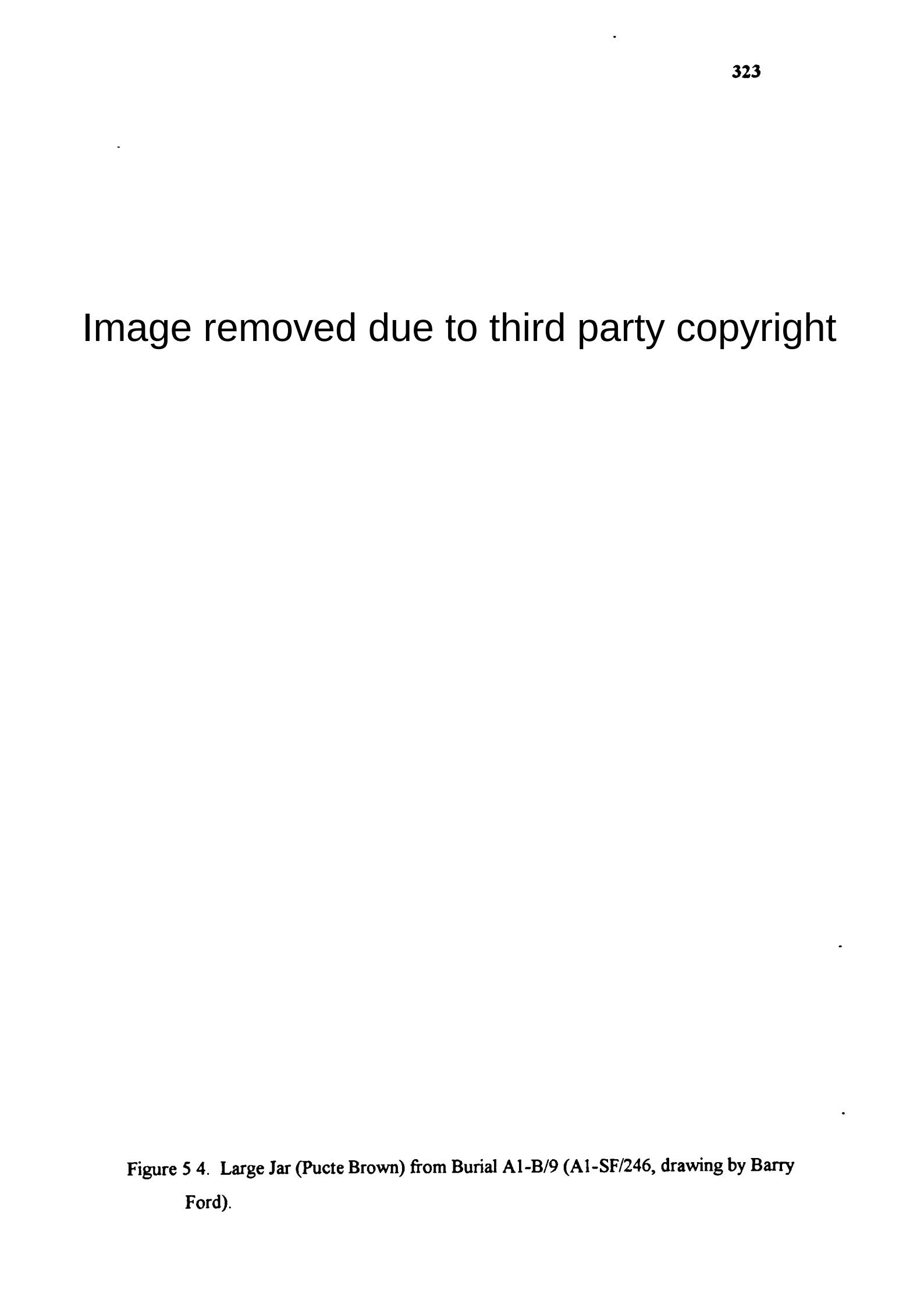


Figure 5 4. Large Jar (Pucte Brown) from Burial A1-B/9 (A1-SF/246, drawing by Barry Ford).

individual.

The accompanying vessel (A1-SF/247) had been inverted, and placed within the orifice of the larger jar (Figure 5.5). Its mottled brown slip grades from dark brown to tan, the latter bringing it into the range of colours on the other two vessels. Its paste also corresponds with that described for the aforementioned vessels. The bowl appears to depict a snake?, whose tail and head protrude from a small, medially positioned bowl with a direct rim. The bowl is situated so as to appear to rest on the body of the snake. The head is slightly higher than the tail section, the former coming to rest on the tip of the latter. Both the tail and head segments are hollow except for the very terminal sections. Preslip incising had been used to form the eyes and nostrils, whereas gouging and modelling had been employed to produce the mouth portion. This last vessel is again best interpreted as a special, as an exhaustive literature survey failed to produce anything quite like it. Taken together, the three aforementioned vessels indicate that Burial A1-B/9 was deposited sometime around the Late Preclassic (Xakal phase)/Early Classic (Ahcabnal) transition, ca. 100-350 A.D. It is interesting that they seem to have formed a distinct group even prior to their deposition within the grave. Given their lack of correspondence with other known types, and similarities in slip and paste, they appear to have been produced and subsequently employed as a set. Further insights into the role of these vessels will be briefly discussed below.

Additional grave goods recovered from within burial A1-B/9 included one barrel-shaped jadeite bead (A1-SF/224). This item may have been placed in the individuals mouth at the time of interment, a common practice among the ancient Maya (see Coe 1993:170). Also discovered were one medial section of an obsidian blade (A1-SF/225), four cut and polished conch (*Strombus*) shell segments, rectangular in form (A1-SF/46 [Figure 5.6f], A1-SF/47 [Figure 5.6g], A1-SF/48 [Figure 5 6b], A1-SF/49 [Figure 5.6c]), one large conch shell (*Strombus*) section (A1-SF/45, Figure 5 6e), cut but unpolished (possibly a blank), one complete bivalve (*Nephronaias ortmanni*, freshwater clam) drilled twice (A1-SF/51, Figure 5 6a), one unmodified freshwater clam, right valve (A1-SF/50, Figure 5.6d), and one section of drilled avian bone (A1-SF/44), possibly a turkey humerus The latter is likely connected to the two tubular bone sections recovered from outside the crypt proper. These artefacts are commonly found in burials (e.g. Willey 1972:234-235; Willey et al. 1965:496) Coe (1993 180-181) has argued that such tubes were probably utilised during the administration of ritual, hallucinogenic enemas He suggests that they may in fact have been employed as the enema syringe, or

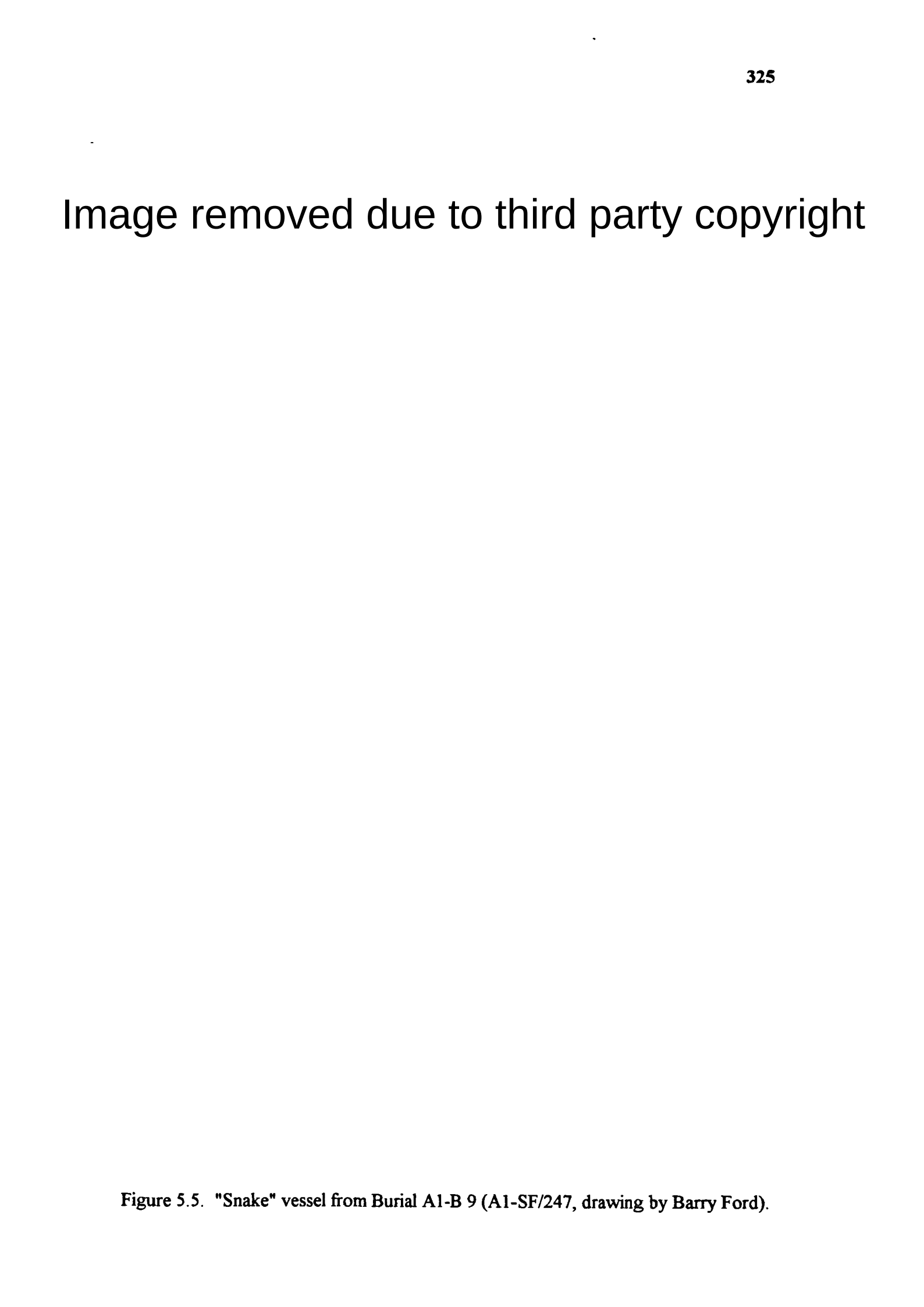


Figure 5.5. "Snake" vessel from Burial A1-B 9 (A1-SF/247, drawing by Barry Ford).

Figure 5.6. Shell artefacts from Burial A1-B/9: (a) bivalve (A1-SF/51); (b) conch section (A1-SF/48); (c) conch section (A1-SF 49); (d) bivalve (A1-SF/50) (e) conch (A1-SF 45); (f) conch section (A1-SF/46); (g) conch section (A1-SF/47; all drawings by Peter McDonagh and Lucinda Blatch).

clyster (see also de Smet 1985.57; Hellmuth 1985 139-140) Coe notes further that depictions of this practice on funerary ceramics often include "a wide-mouthed" jar with a "froth on top", implying that this vessel contained the liquid employed during the enema ceremony (see also Hellmuth 1985:137-138). Given its wide orifice, and formal similarities to some of the vessels depicted in scenes related to the enema ritual (see de Smet 1985, Plates 3a, 26), the large jar from burial A1-B/9 may have been an "enema jug". Another recurrent piece of equipment in these representations is a cup, which is used both for dipping the intoxicant from the larger jar, as well as for drinking of the beverage (Hellmuth 1985. 142-143; see de Smet, Plates 7a, 9a, 9b, 10, 13a, 13c, 14a, 14c, 19a, 20a, 20b27, 28, 3441a, 41c). Hellmuth (1985 142) notes that these drinking cups appear "in a variety of sizes and shapes." It is possible that the Jaguar God of the Underworld vessel and the "snake" vessel could have been employed as drinking cups.

In connection with the above, it is of interest that because the intoxication ritual is often portrayed in scenes representing Xibalbá and the gods that inhabited this underworld (see Coe 1993:180; Hellmuth 1985:144-145), the Jaguar God of the Underworld would have probably participated in the rite. This possibility is reaffirmed by the previously mentioned uncharacteristic mouth depiction on the Zubin vessel. Stross and Kerr (1990:356-358) have suggested that "howling" is connected with the hallucinogenic experience, and they illustrate a number of mesoamercian depictions of "howling" (see Stross and Kerr 1990, Figures 15, 16), some clearly connected with the enema ritual (see Stross and Kerr 1990, Figure 20). In all of these the depicted individuals exhibit mouth features identical to that of the Jaguar God of the Underworld on the Zubin vessel Thus the Zubin depiction is possibly a representation of the Jaguar God of the Underworld in the midst of the intoxication ceremony.

Taking the burial assemblage as the unit of analysis, particularly the "Jaguar God of the Underworld" vessel, wide-mouthed jar, and bone tubes, it seems likely that a large portion of this collection can be interpreted as ritual intoxication paraphernalia. The individual interred within this grave may therefore have been actively involved in such a ritual, and thus may have been a shaman of some sort, or at least an important person intricately associated with the rituals practised by such people. It is clear, however, that given the importance of this ritual, and the elaborateness of the equipment involved, this individual was a consequential personage at Zubin during the Late Preclassic/Early Classic time period This is reaffirmed by the fact that the death of this individual probably stimulated the termination of activity associated with Structure A1-4th. The

primary architectural focus of Burial A1-B/9 was thus the A1-4th structure However, the interment and its associated rituals, as well as being associated with "termination", may also be considered "dedicatory" with reference to the new A1-3rd construction (see Becker 1992).

Burial A1-B 10. Burial A1-B/10, classified as a simple crypt following Welsh (1988), was encountered during excavation of the A1-3rd (Level 4) courtyard floor. Located within Unit A1-4, the top of the capstones for this grave were ca. 4.84 m below the trench datum (see Figures 4.3 and 4.6). The axially aligned burial cut had intruded through the earlier A1-4th floor, suggesting the possibility that it was placed as a termination ritual involved with the abandonment of that living surface, although it might also be considered dedicatory with reference to the new A1-3rd construction (see Becker 1992). The grave itself was oriented north-south, and consisted of a number of roughly cut capstones resting on a series of crude limestone uprights. These formed a ca. 35 cm high interior space. The base of the grave was ca 5.24 m below the trench datum. Overall length of the chamber was ca. 1.00 m, and its width was ca. 30 cm.

The interment itself was poorly preserved, due primarily to the aerobic conditions of the chamber (Figure 5.7). The sections of bone that were present indicated that the individual had been placed in a prone position, with the head to the south. They also suggested that the arms and legs were extended. The size of both the grave itself, and the remaining bones, implied that this was a child burial. This was reaffirmed by the subsequent osteological analysis, which provided an age of 4-5 years for this individual. Gender could not be determined Grave goods consisted of four perforated olive shell "tinklers" (A1-SF/40 [Figure 5.8a], A1-SF/41 [Figure 5 8b], A1-SF/42 [Figure 5.8c], A1-SF/ 43 [Figure 5.8d]). These were recovered from beneath the cranial fragments.

Due to the lack of ceramic offerings, and the mixed nature of the Level 4 ceramic assemblage, dating of this interment is difficult However, it is apparent that burial A1-B/10 was capped by three refloorings, suggesting that it was placed sometime during the earliest occupation of the A1-3rd courtyard floor. A date of 100-350 A.D. is therefore likely.

Burial A1-B 13. Burial A1-B/13 was placed sometime later, as only two refloorings were discovered above it. Although no solid date can be provided, this stratigraphic information suggests that this burial occurred sometime between 350-600 A D. The axially aligned interment, classified as a simple crypt following Welsh (1988), was located fully within the boundaries of Unit A1-3 (see Figures 4.3 and 4.6). This

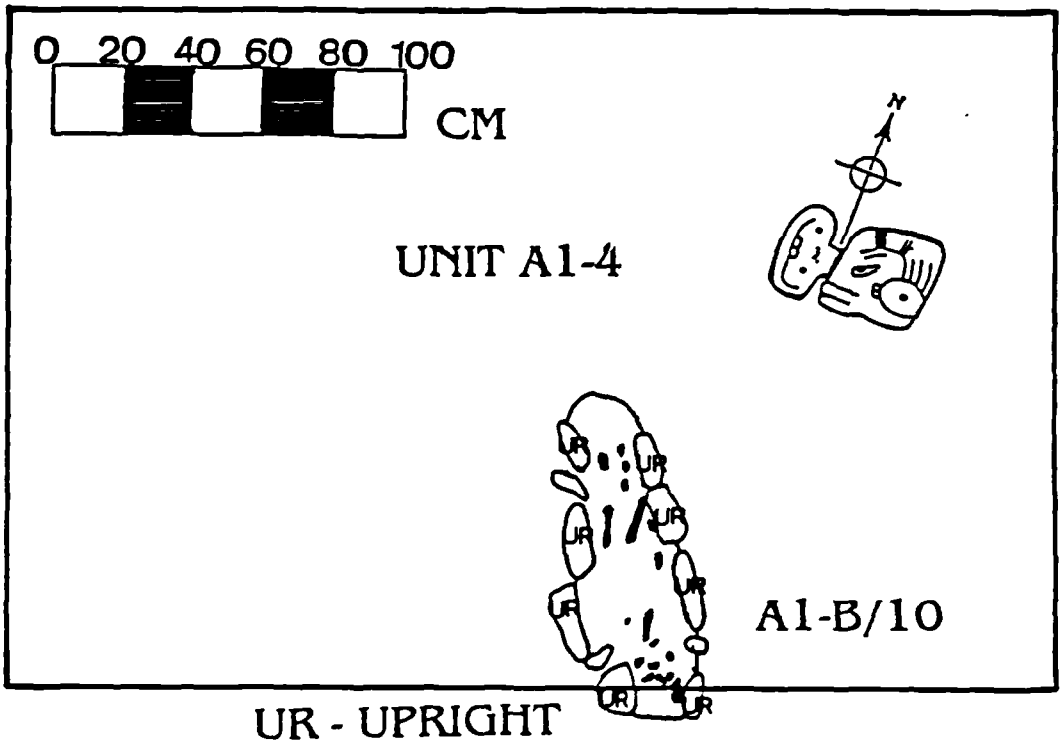


Figure 5.7. Top plan of Burial A1-B/10.

Figure 5.8. Olive shell "tinklers" from Burial A1-B/10: (a) A1-SF/40; (b) A1-SF/41; (c) A1-SF/42; (d) A1-SF/43 (drawings by Peter McDonagh and Lucinda Blatch).

grave had been cut through both the A1-4th (Level 5) and Level 6 courtyard floors, its base corresponding with the Level 7a surface (ca 6.39 m below the trench datum). As the burial was placed during the occupation of Structure A1-3rd, it is best interpreted as non-dedicatory (Coe 1959:78). The chamber itself, having a ca. 40 cm high interior space, was formed by a series of cut limestone uprights, surmounted by a number of similarly unelaborate capstones. The orientation was roughly north-south. The top the capstone cover was ca. 5 95 m below the trench datum. Unfortunately, this burial could not be excavated as it was not discovered until the final day of excavations. A cursory investigation did show that the individual had been interred in a prone position, with the head to the south. Preservation of the remains appeared to be good. No grave goods were noted.

Burial A1-B 11. Burial A1-B/11, another axially aligned simple crypt (Welsh 1988), was discovered within Unit A1-4 (see Figures 4.3 and 4.6). The capstones of this burial were encountered at ca. 5.25 m below the trench datum. This interment was capped only by the last reflooring, indicating that it had been placed during or coinciding with the last occupation of the A1-3rd courtyard floor. Thus a date of 600-675 A.D. is likely for this burial. The burial cut intruded through both the earlier A1-4th (Level 5), and Level 6 courtyard floors. Given that the interment was placed during the occupation of A1-3rd, it is best interpreted as non-dedicatory. The chamber itself, oriented north-south, consisted of a number of cut limestone uprights covered by a series of roughly placed capstones. These formed a ca. 30 cm high interior space. A further layer of cobbles (6.4-25.6 cm) had been deposited above the crypt proper. The legs of the individual extended into the north wall of the unit, and due to the unstable nature of this area of the trench no excavations could be undertaken below the individuals knees (Figure 5.9). For this reason a length for the grave cannot be provided. The floor of the burial, encountered at ca. 5.59 m below the trench datum, was roughly 54 cm across. Preservation of the remains was good to excellent. The individual had been placed in a prone position, head to the south, arms and legs extended Subsequent osteological analysis indicated that this individual was a male of 18-30 years of age No grave goods were discovered

Burial A1-B 12. Burial A1-B/12 , the top of which was encountered at ca 5.72 m below the trench datum, was discovered in Unit A1-4 (see Figures 4.3 and 4.6) This axially aligned simple crypt (Welsh 1988), oriented north-south, had been cut through both the earlier A1-4th (Level 5) and Level 6 courtyard floors. Its base coincided with

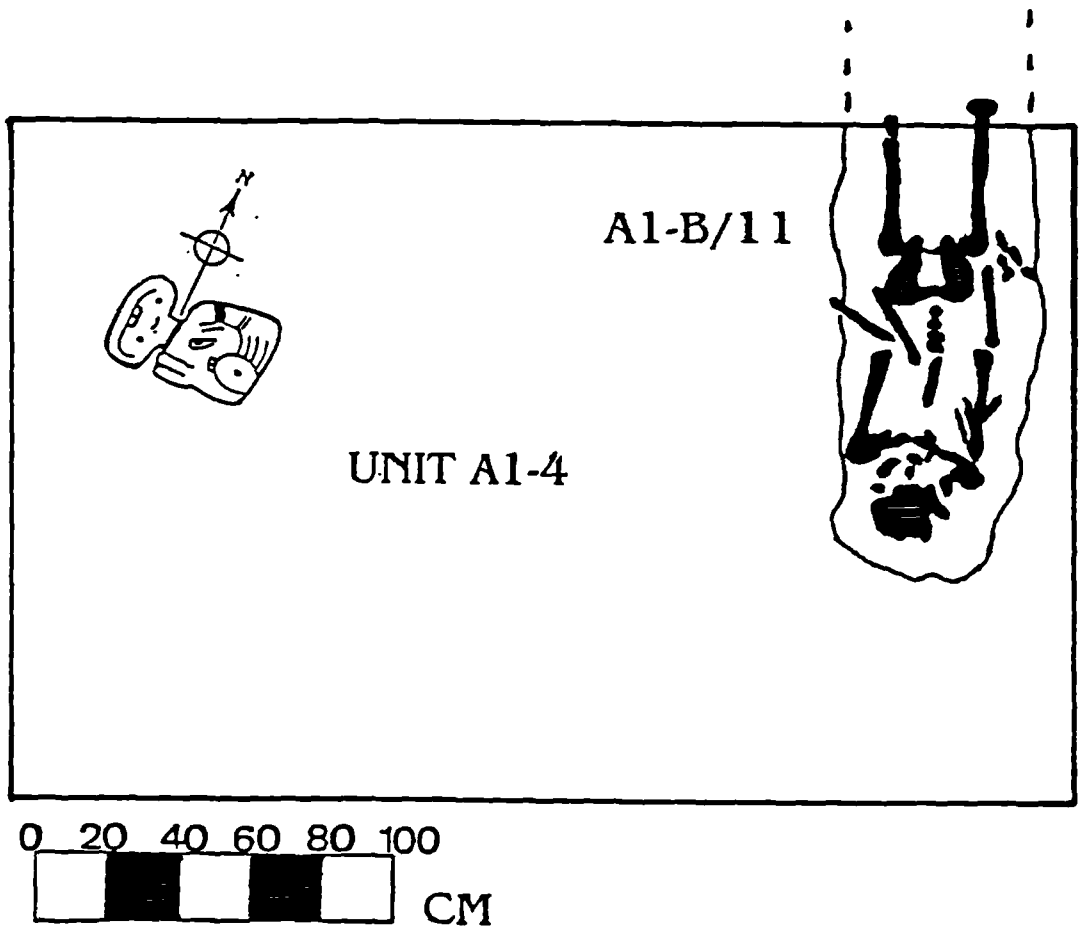


Figure 5.9. Top plan of Burial A1-B/11.

the top of the Level 7a surface (ca. 6.30 m below trench datum). Only the final reflooring capped this interment, indicating that it had been placed near the end of the A1-3rd occupation (ca. 675-750 A D.) Once again, the timing of deposition for this interment suggests that it was non-dedicatory. The chamber itself, ca. 45 cm in height, consisted of a number of roughly hewn uprights capped by a series of similar capstones. Above this a number of large, cobble sized (6.4-25.6 cm) limestone slabs had been deposited. This haphazard cluster of rocks was ca. 45 cm thick, the top of which was exposed at a depth slightly above the Level 6 courtyard surface (ca. 5.30 m below trench datum).

The floor of the simple crypt was ca. 1.90 m in length and ca. 38 cm wide. The interred individual was poor to moderately well preserved, with sections of the legs exhibiting the best state of preservation (Figure 5.10). The aerobic conditions of the chamber undoubtedly hastened the decay of the bone material. Additionally, rodent activity is indicated by the presence of a run cutting across the Level 6 courtyard floor, joining Burials A1-B/11 and A1-B/12 (see Figure 4.4). The sections of remaining bone suggested that the individual had been interred in an extended, supine position, arms at the side, head to the south. The ensuing osteological analysis suggested that this individual was older than 35 years of age. The poor preservation of the remains prohibited assessment of gender.

Burial A1-B/12 grave goods included two whole obsidian blades (A1-SF/236, 238), four proximal sections of obsidian blades (A1-SF/233, 234, 235, 237), two cut and polished conch (*Strombus*) shell disks (A1-SF/229 [Figure 5.11c], A1-SF/230 [Figure 5.11d]), two perforated and incised conch (*Strombus*) shell "adornos" (A1-SF/231 [Figure 5.11a], A1-SF/232 [Figure 5.11b]), and one perforated freshwater clam (*Nephronaias ortmanni*) valve (A1-SF/228 [Figure 5.11e]) Ceramic offerings included a large Mountain Pine Red: Mountain Pine Variety dish (A1-SF/244), a Late Classic, Xnipek phase (600-675 A.D.) type. This vessel had been placed on the interred individuals knees (see Figure 5.10).

A second vessel was recovered from an area slightly to the south of the postulated head position (see Figure 5.10). This poorly preserved polychrome cylinder vase (A1-SF/245) has a cream slip on the outside, and an orange slip on the interior (Figure 5.12). Decorations include red bands encircling the interior and exterior vessel rim. A similar band appears to have encircled the basal portion of the vessel. A glyph band, executed in red, black, and orange, occurs on the jar neck. This consists of a

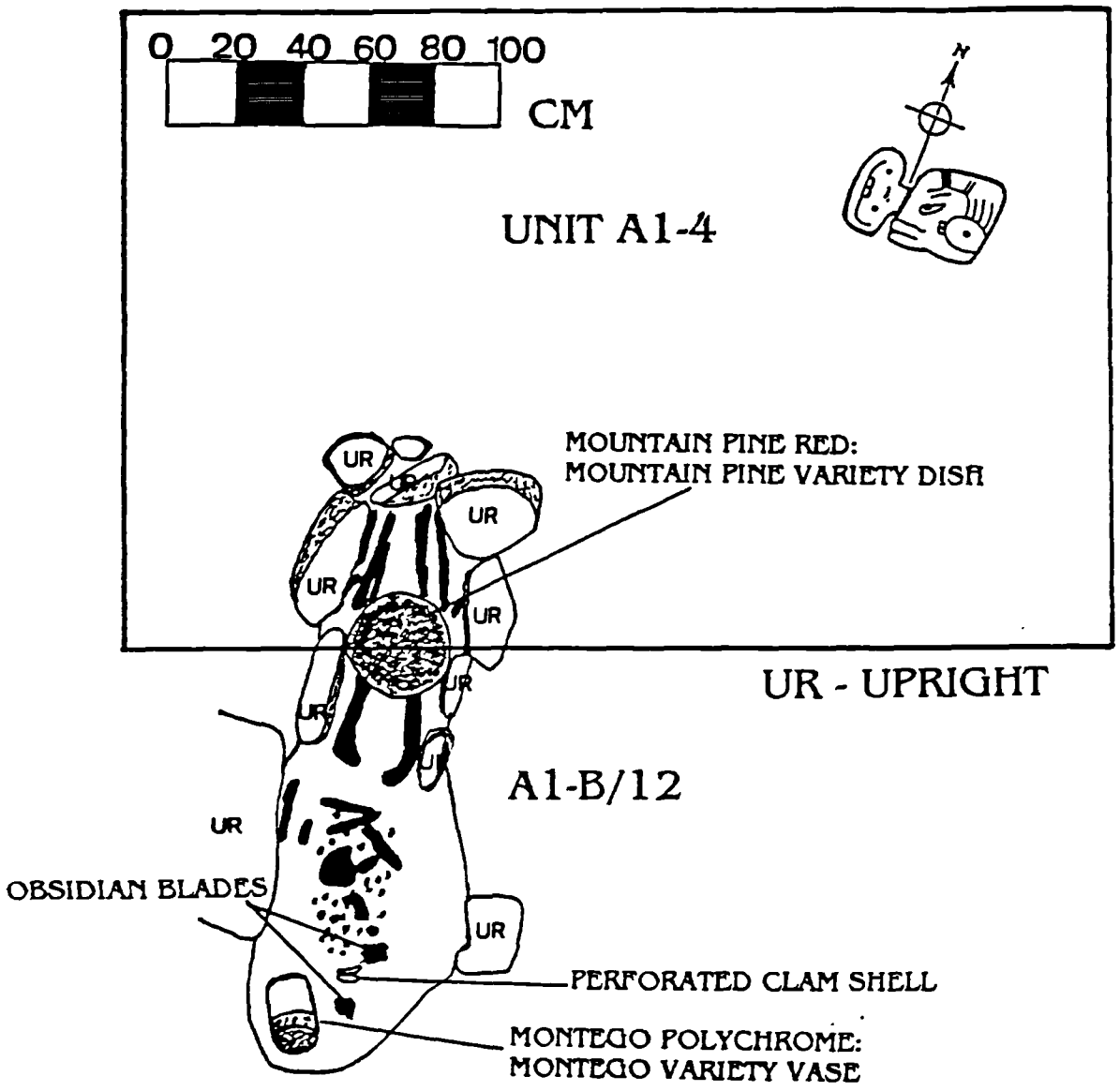


Figure 5.10. Top plan of Burial A1-B/12.

Figure 5.11. Shell artefacts from Burial A1-B/12: (a) conch adorno (A1-SF/231) (b) conch adorno (A1-SF/232); (c) conch disk (A1-SF/229); (d) conch disk (A1-SF/228), (e) perforated clam (A1-SF/228, drawings by Peter McDonagh and Lucinda Blatch).

Figure 5.12. Montego Polychrome. Montego Variety cylinder vase from Burial A1-B/12 (A1-SF/245; drawing by Barry Ford).

repetitive series of representations, six in total, and one smaller item, the latter probably being a space filling element (Simon Martin, personal communication 1994). Given the repetitive nature of the depiction, these were originally interpreted as "psuedoglyphs". At most they were thought to provide minimal textual information. The epigrapher, Simon Martin (personal communication 1994), agrees with the psuedoglyph interpretation. Although poor preservation ruled out accurate identification of other decorations, remnants of red and black slip on the body of the vessel imply that further glyphs or psuedoglyphs had originally existed. The vessel exhibits the ash paste characteristic of the British Honduras Volcanic Ash Ware, and it is clearly a member of the Maxik Ceramic Complex. It fits Gifford's (1976) description for Montego Polychrome: Montego Variety exactly. Thus the vase dates to the Late Classic, Maxik phase (675-875 A.D.).

Given that the accompanying vessel is solidly attributable to the preceding Xnipek phase Ceramic Complex, and that no obvious Maxik sherds were recovered from the fill above the crypt, a date of 675-750 A.D. for this interment seems reasonable. The presence of the polychrome vessel also indicates that interred individual was of some importance within the Zubin community at this time. It is also likely that the final reflooring of the A1-3rd courtyard floor is directly associated with the placement of this burial.

Level 3, A1-2nd

Burial A1-B 7. Burial A1-B/7, classifiable as a simple crypt (see Welsh 1988), was encountered in Unit A1-4 directly in front of the A1-2nd platform facing wall (see Figures 4.3 and Figure 4.7). This axially aligned burial had been cut through the A1-3rd (Level 4) courtyard floor, and was capped by the later A1-2nd (Level 3) courtyard surface. Indications are that this interment is associated with the termination of the earlier A1-3rd structure, and the dedication of the new A1-2nd construct Whether the death of the individual prompted the new construction cannot be determined with any certainty, although it is likely related given the richness of the postulated grave offerings (see below).

With reference to this it should be noted that Burial A1-B/7 was reopened at a time corresponding to the termination of the A1-2nd structure. Some of the grave goods appear to have been removed, and new offerings made. Thus the burial recovered

archaeologically reflects at least two separate offertory events. The chamber itself, oriented north-south, consisted of a series of roughly hewn capstones overlying a number of similarly crude limestone uprights (see Figure 4 7). The top of the capstones were exposed at ca. 4.60 m below the trench datum. A number of these had collapsed in on the interment. The base of the burial was ca. 5.19 m below the trench datum, indicating that prior to the capstones collapsing the interior height of the chamber would have been ca. 59 cm. Overall length of the simple crypt was 1 74 m, and its average width was ca. 60 cm.

The individual interred within the A1-B/7 grave was poorly preserved, due not only to the collapse of the capstones, but also rodent activity (Figure 5.13). The sections of bone that were present indicated that the individual had been placed in an extended, supine position, with the head to the south and arms extended at the sides. Interestingly, some of the long bone fragments showed evidence of burning. No teeth were recovered, and only two cranial fragments were discovered near the knee and foot area. It seems likely that the skull of this individual had either not been deposited during the initial burial, or that it had been removed at a later time (see below). The extremely poor preservation of these remains inhibited assessments of age and gender.

During the initial deposition of the burial, two San Pedro Impressed: San Pedro Variety dishes (A1-SF/239 [Figure 5.14a], A1-SF/240 [Figure 5.14b]) had been placed near the head region. The presence of these Late Classic, Xnipek phase (600-675 A.D.) vessels, coupled with the postulated timing for the construction of the associated A1-2nd architecture (see Chapter 4), suggests a date of 675-750 A.D. for the deposition of this interment. Due to some later intrusive activity (see below), one cannot be sure as to the original positioning of these vessels (i.e. lip-to-lip). It is also impossible to ascertain whether the dishes had been inverted over the cranium, whether the cranium had been deposited within the dishes, or whether in fact a cranium was ever present. In fact, the retention of a cranium for ancestor veneration purposes is not an uncommon practice (see McAnany 1995:60-63).

The only other artefact recovered from Burial A1-B/7 was a small, jadeite disk bead (A1-SF/223). The bead was also discovered near the postulated head region. This may represent the Maya ritual whereby a solitary jadeite bead is placed in the mouth of the individual at the time of interment However, a more complicated scenario can also be offered (see below) Confusion over this, as well as over the actual placement of the head and the artefacts is primarily a result of the intrusive deposition of Cache A1-F/1.

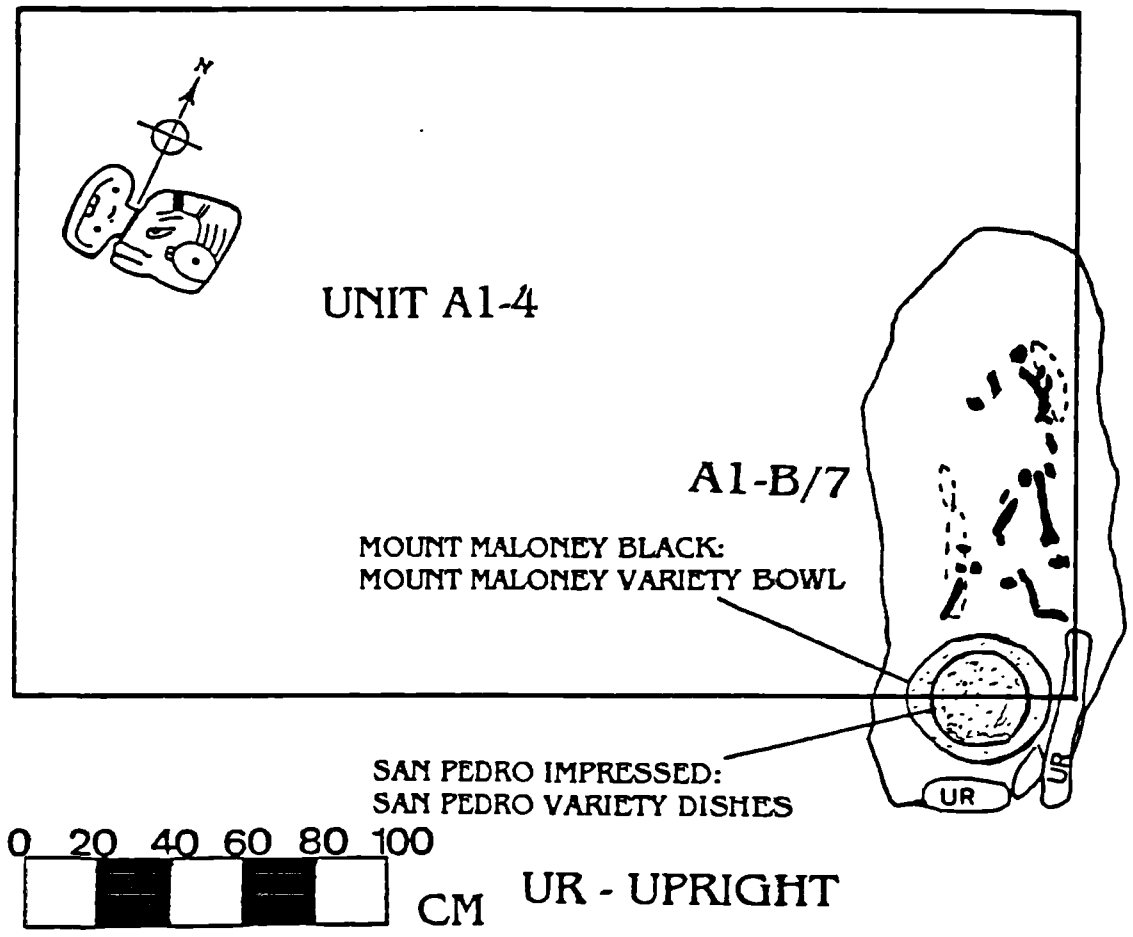


Figure 5.13. Top plan of Burial A1-B/7.

Figure 5 14. San Pedro Impressed San Pedro Variety dishes from Burial A1-B/7 (a) top vessel (A1-SF/239), bottom vessel (A1-SF/240; drawings by Richard Brien and Barry Ford)

This feature will be discussed in detail below, within an overview of the A1-1st occupation.

Burial A1-B 8. Burial A1-B/8, classified as a capped pit following Welsh (1988), was deposited during the termination of A1-3rd occupation, and construction of the A1-2nd structure (see Figures 4.3 and 4 8). Thus it is contemporaneous with the placement of the previously discussed Burial A1-B/7 (675-750 A.D.). This axially aligned grave was located within Unit A1-3, and had been cut into the previous A1-3rd structure at a point suggested to have originally been the location of a stair riser leading up to the earlier platform. The grave itself consisted of a haphazard arrangement of capstones positioned atop a few very roughly hewn uprights (see Figure 4 8). This covering, the top of which was ca. 4.01 m below trench datum, was only found above the chest of the individual. To the south the grave was cut beneath the A1-3rd terrace surface, this earlier feature functioning as protection for the cranium. The bottom of the grave was encountered at ca. 4.38 cm below trench datum, thus the "chamber" section was ca. 37 cm in height.

The floor of the chamber was ca. 2.00 m in length, and ca. 45 cm wide. A simple dry-stone core deposit, mainly larger pebble [.04-6 4 cm] and cobble sized [6.4-25.6 cm] clasts, had been employed to cover the lower extremities. The interment itself exhibited good to excellent preservation, the lower limbs being in particularly good condition as a result of the anaerobic conditions provided by the moderately compact core deposit (Figure 5.15). The grave was oriented north-south, and the remains indicate that the individual had been interred in a extended, prone position, head to the south, arms folded under the body beneath the face. Osteological analysis later indicated that this individual was a male of young to middle adult age. This burial was probably placed as a termination ritual focusing on Structure A1-3rd, although it might also be considered dedicatory to the new A1-2nd construction (see Becker 1992)

The only artefact recovered from this burial was a small, barrel-shaped, spondylus (*Spondylus* sp.) shell bead (A1-SF/52, Figure 4 9a). This was discovered near the head area, and following what is known about the deposition of singular jadeite beads, it is plausible that this item may have originally been deposited in the individuals mouth The paucity of grave goods, and the prone position of the individual, suggests that Burial A1-B/8 was not the "significant" interment at this time, but rather reaffirms the importance of the individual discovered within Burial A1-B/7.

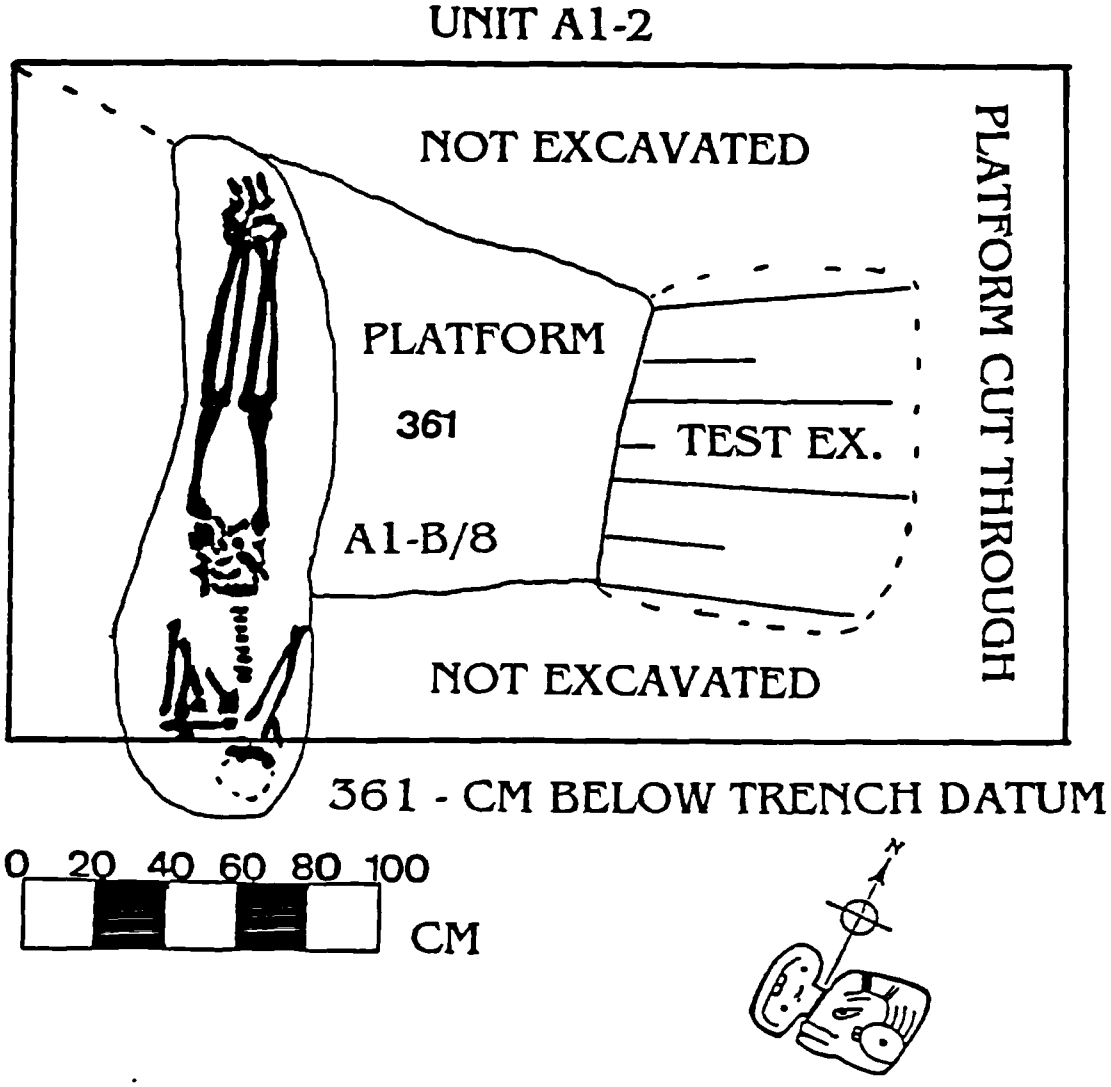


Figure 5.15. Top plan of Burial A1-B 8.

Burial A1-B 6 Burial A1-B/6, the final burial associated with the A1-2nd architecture, was recovered from the area between the western retaining wall facing and the platform facing wall (see Figure 4.3). The grave itself, which dates to the 675-750 A.D. time span, is best classified as a simple crypt (see Welsh 1988) The axially aligned chamber, oriented north-south, was formed by a series of capstones which rested on a series of limestone uprights along the western boundary, and abutted the retaining wall facing on the east (Figure 5.16). The top of the capstones was encountered at ca 4.14 m below the trench datum. The base of the chamber was ca. 4.65 m below the trench datum. The chamber was thus ca. 51 cm in height.

The floor of the grave was ca. 45 cm wide, and ca. 1.90 m long. Due to the aerobic conditions of the chamber, preservation of the human remains was poor. The sections that were exposed indicated that the individual had been placed in an extended, prone position, arms extended at the sides, head to the south (Figure 5.17). Preservation was such that gender and age could not be determined.

Grave goods consisted of one cylindrical jadeite bead (A1-SF/222), possibly having originally been placed in the mouth of the individual, one distal section of an obsidian blade (A1-SF/35), located near the left hand, and one whole obsidian blade (A1-SF/36), recovered from the area adjacent to the feet. The beaks of two "perching birds" (*Passeriformes*) were also discovered. Although it is difficult to ascertain for certain, it is likely that these remains also constituted grave offerings.. Indications are that this interment was placed as a dedicatory offering, focusing on the A1-2nd structure. This postulation reflects the fact that the burial appears to have been constructed at the same time as the both the retaining and platform facing walls. In actuality, the retaining wall was employed not only to form one side of the chamber, but also to partially support the capstones. Concomitantly, the grave was not intrusive into any of the earlier floors. Thus, it is highly likely that this interment was explicitly associated with the A1-2nd structure, and can therefore be considered dedicatory in relation to it. Whether in fact the individual interred within this grave was a sacrifice cannot be determined with any certainty.

Level 2, A1-1st

Cache A1-F 1. Cache A1-F/1 is key to the interpretation of a series of offertory events associated with Structures A1-2nd and A1-1st Specifically, it provides an all

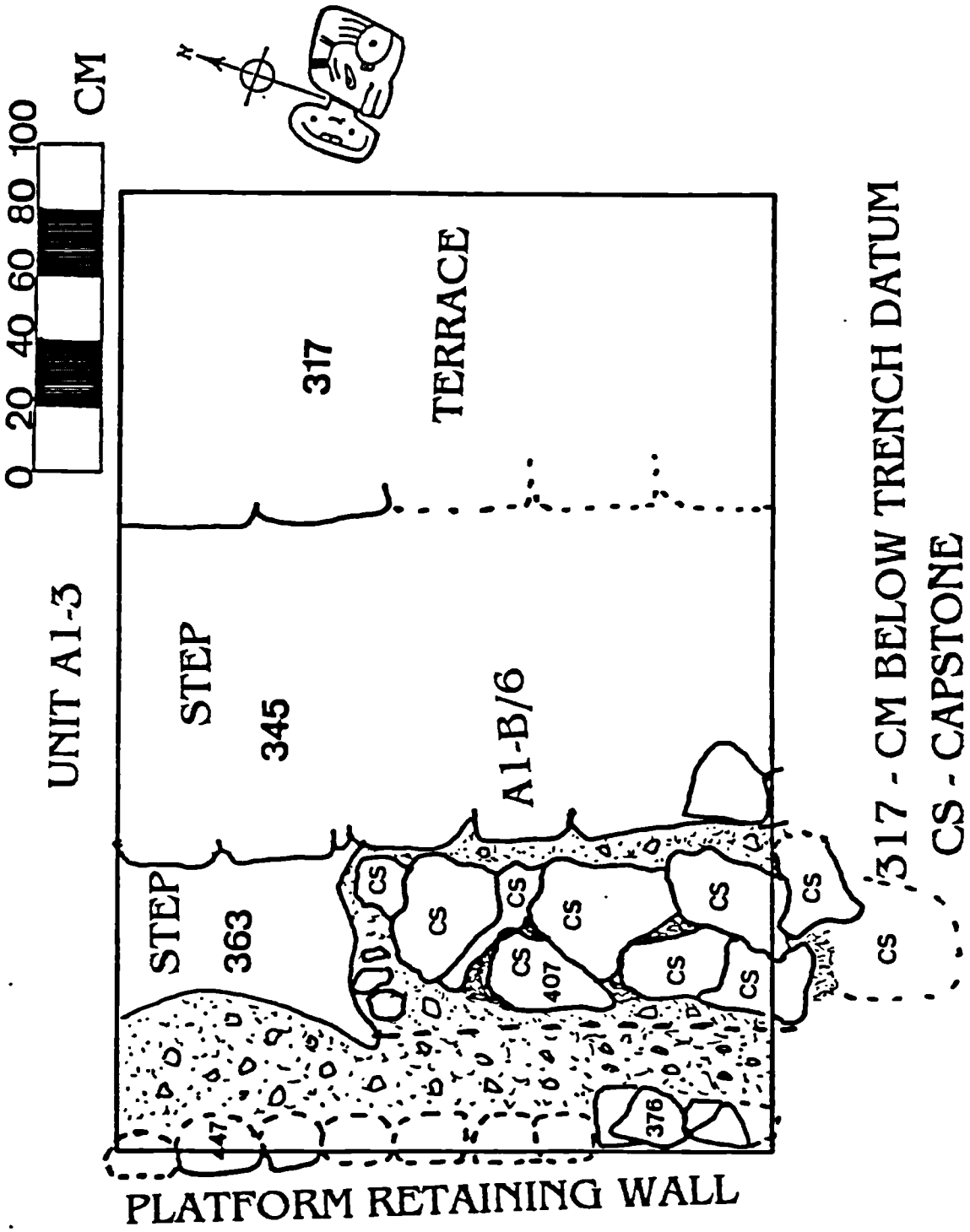


Figure 5.16. Top plan of Burial A1-B/6 grave chamber.

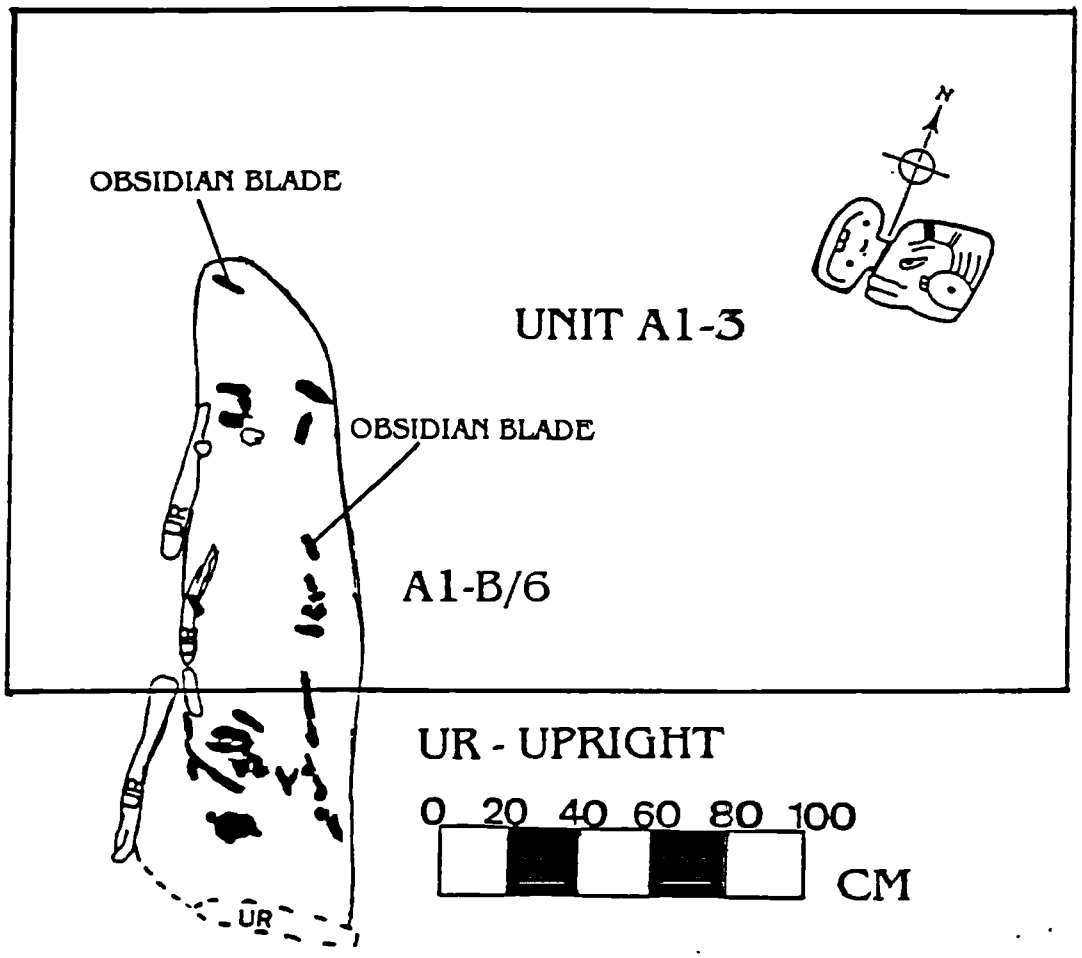


Figure 5 17. Top plan of Burial A1-B 6.

important link between two burials, each associated with a different construction event. Cache A1-F/1 was encountered during the excavation of the basal section of the A1-1st stairs in Unit A1-4 (see Figures 4 3 and 4.8). Excavations had removed the A1-1st stair facing, and associated backing masonry and dry-stone core, in order to follow the A1-2nd courtyard floor east, where it eventually abutted the previously discussed A1-2nd platform facing wall. At this point a large, axially aligned circular cut through the A1-2nd courtyard floor was isolated in front of the platform wall, adjacent to the south wall of the trench. This was clearly a subfloor cache.

The offering had obviously been made in combination with the construction of A1-1st. The cache fill consisted of a layer of dark grey sediments, the top of which corresponded with the surface of the A1-2nd courtyard floor (ca. 4.56 below the trench datum). Excavation of this ca. 10 cm thick deposit revealed a large limestone slab ca. 9 cm thick. Removal of this "capstone" exposed the base of one of the San Pedro Impressed. San Pedro Variety vessels (A1-SF/239, Figure 5.14a) previously mentioned in the discussion of Burial A1-B/7 grave goods (base at ca. 4.75 m below the trench datum). Further excavations indicated that the upper vessel had been positioned lip-to-lip with the other aforementioned San Pedro Impressed: San Pedro Variety dish (A1-SF/240, Figure 5.14b). Both of these Xnipek phase (600-675 A.D.) vessels had in turn been placed within a large Mount Maloney Black: Mount Maloney Variety bowl (A1-SF/241, Figure 5.18), characteristic of the late Maxik phase (ca. 750-875 A D.; see Gifford 1976). The base of the Mount Maloney bowl rested upon a deposit of fine sediments, the top of which was encountered at ca. 5.06 cm below trench datum. Upon removal of these vessels we first realised that the cache was intrusive into the earlier A1-B/7 burial (see Figure 4.7), associated with the construction of Structure A1-2nd (see above).

Given that the vessels could not be considered contemporaneous, and the obvious differential timing of the A1-B/7 interment and A1-F/1 intrusive cache, it was deemed likely that the two San Pedro Impressed dishes had been initially deposited with the A1-B/7 burial during the construction of Structure A1-2nd (675-750 A.D.). Upon termination of this occupation, Cache A1-F/1 was cut into the burial, and the Mount Maloney bowl was deposited, the San Pedro Impressed vessels placed lip-to-lip within it. This activity would have occurred immediately prior to the construction of Structure A1-1st (675-750 A.D.). What remained puzzling was the intention behind the A1-F/1 offering. Was it a termination ritual focusing on the A1-2nd structure, and the individual

Figure 5.18. Mount Maloney Black: Mount Maloney Variety bowl (A1-SF/241) from Cache A1-F/1 (drawing by Richard Brien).

interred within the confines of Burial A1-B/7? Or was something more complicated represented by this action? The clue that eventually implicated the latter possibility was the small jadeite disk bead (A1-SF/223) previously discussed as having come from the area beneath the three vessels. This lone object provides a tenuous but intriguing link to Burial A1-B/5, an interment coeval with the A1-F/1 cache.

Burial A1-B 5. Burial A1-B/5, classified as a simple crypt following the Welsh (1988) system, was placed at the same time as Cache A1-F/1. This axially aligned grave, exposed in Unit A1-3, was intrusive into the earlier A1-2nd structure, having been cut through the terrace riser (see Figure 4.3). The grave, oriented north-south, differed from the other simple crypt burials at Zubin in that uprights and capstones were not used to form the sides or cover of the chamber (see Figure 4.8). Rather, a series of large limestone slabs had simply been arranged vertically around the body, the tops of which rested on each other to form a fairly substantial, "triangular-shaped" chamber. The top of this arrangement was encountered at ca. 3.72 m below the trench datum. The bottom of the burial was ca. 4.49 m below the trench datum, the chamber thus being ca. 77 cm high. This inner chamber was ca. 80 cm wide and ca. 1.90 m in length. Above and around these numerous limestone slabs had been haphazardly deposited, the top of which corresponded with the surface of the A1-2nd terrace (ca. 3.15 m below trench datum).

After removal of this overlying deposit, the initial cut into the A1-2nd terrace was measured to be ca. 1.12 m wide, 2.00 m in length, and ca. 1.34 m deep. Skeletal material was very poorly preserved, due primarily to the aerobic environment of the chamber (Figure 5.19). The locations of teeth, and some sections of arm and leg bones, indicate that the individual was interred in an extended position, with the head to the south. There is no sure way to determine whether this burial was prone or supine, but given the richness of the grave goods, and the overall trend exhibited by the more elaborate A1 interments, it is suggested that the individual was in a supine position. This "status" suggestion is reaffirmed by the recovery of a maxillary right lateral incisor containing a jadeite inlay (A1-SF/58). This conforms to Romero's (1958) E1 type. Poor preservation inhibited gender determinations, but did permit an age assessment of adolescent or older. Seeing as the interment was cut into the A1-2nd architecture, and corresponded with the construction of the A1-1st structure, Burial A1-B/5 might best be interpreted as a termination ritual in that it focuses on the earlier structure, although it must also be considered dedicatory to the new architecture (Becker 1992). The richness of the grave goods (see below) implies that this was a person of consequence at Zubin,

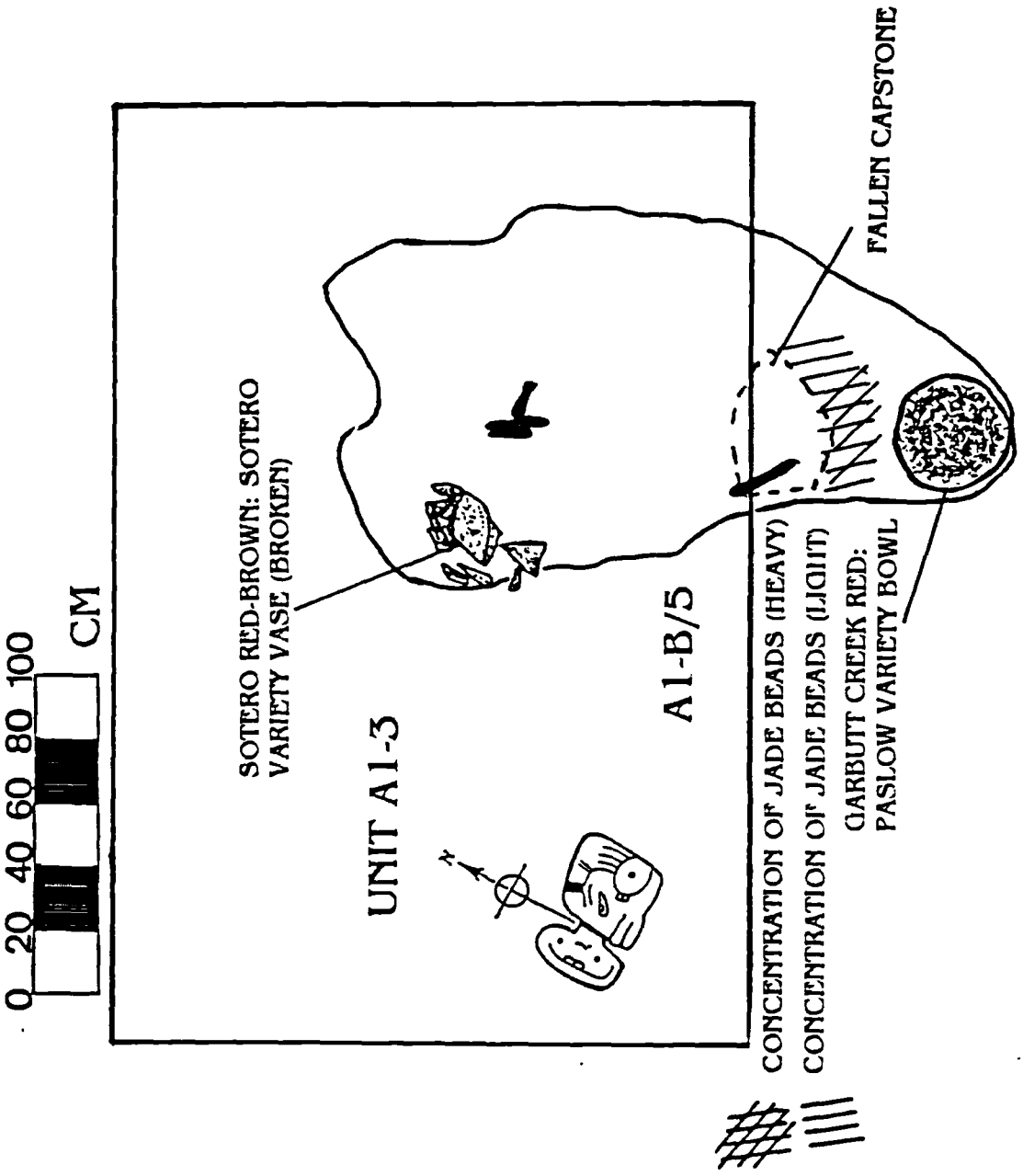


Figure 5.19. Top plan of Burial A1-B/5.

and suggests that the construction of Structure A1-1st may have been stimulated by the death of this individual.

Grave goods were abundant in Burial A1-B/5. Two vessels were encountered. To the north of the head a large Garbutt Creek Red: Paslow Variety bowl (A1-SF/243 [Figure 5.20a]) had been deposited. A Sotero Red-brown: Sotero Variety vase (A1-SF/242 [Figure 5.20b]) had also been placed near the feet. The latter vessel was broken, but fortunately all the fragments were still present, thus reassembly was possible. Other grave goods included a small limestone spindle whorl (A1-SF/57), and a spondylus (*Spondylus* sp.) shell bead (A1-SF/55, Figure 5.21c). Also discovered in this area were seven small jadeite (A1-SF/60, 61, 62, 63, 64, 65, 66) and two spondylus (*Spondylus* sp.) shell inlays (A1-SF/53 [Figure 5.21a], A1-SF/54 [Figure 5.21b]). These all appear to have come from a mosaic of some sort, probably originally having been set in a perishable backing. 155 small jadeite disk beads (A1-SF/67...221), probably from a necklace, were also concentrated around the head region. A large subspherical jadeite bead (A1-SF/56), possibly from the same necklace, was also recovered from this location. Whether the mosaic and shell bead were components of the suggested necklace cannot be determined with any degree of certainty. Finally, a chert biface fragment (A1-SF/274), and a number of armadillo teeth were also discovered. The animal may have been placed with the individual as part of the grave offerings.

The presence of the small jadeite disk beads in Burial A1-B/5 is integral to the hypothesised connection between this interment, Cache A1-F/1 and Burial A1-B/7. These beads were manufactured from a very distinctive "mottled" jadeite. Colour ranges from dark green, blue, white, to translucent, often on the same bead. This mottled jadeite is identical to that of the solitary bead recovered from Burial A1-B/7. In addition, this bead is exactly the same size and shape as those recovered from Burial A1-B/5. Given this connection, a likely scenario is that the death of the individual interred in Burial A1-B/7 stimulated the termination of Structure A1-3rd and the construction of A1-2nd (ca. 675-750 A.D.). Original grave goods included the two San Pedro Impressed vessels, and a jadeite disk bead necklace. Whether the other beads or mosaic pieces were part of this same necklace cannot be determined.

Some time later, in conjunction with the termination of Structure A1-2nd, and the construction of A1-1st (675-750 A.D.), Burial A1-B/7 was reopened via the Cache A1-F/1 cut. At this time the jadeite beads were removed, except for one, and the Mount Maloney bowl was deposited, the San Pedro dishes now being placed lip-to-lip inside

Figure 5 20. Ceramic vessels from Burial A1-B/5 (a) Garbutt Creek Red. Paslow Variety bowl (A1-SF/243); (b) Sotero Red-Brown: Sotero Variety vase (A1-SF/242; drawings by Tim Stevens)

Figure 5.21. Spondylus shell artefacts from Burial A1-B/5: (a) inlay (A1-SF/53); (b) inlay (A1-SF/54); (c) bead (A1-SF/55, drawings by Peter McDonagh and Lucinda Blatch).

this vessel. The head of the Burial A1-B/7 individual may also have been removed at this time in a ritual connected with ancestor veneration (see McAnany 1995.60-63). Whether the singular jadeite disk bead was left for a reason, or by accident remains unanswered. However, it is clear that the jadeite beads obtained through the A1-F/1 cache cut were redeposited with the A1-B/5 interment. This scenario suggests that the inhabitants of Zubin knew exactly where to dig in order to obtain the beads. Given that the time between the two interments does not appear to have been too long, it does seem likely that some of the Zubin residents would have retained this information. A degree of respect for the A1-B/7 individual is implied given that the Mount Maloney bowl was deposited in exchange for the beads. In sum, there is a potentially close connection (e.g. kinship) between the individuals interred within burials A1-B/7 and A1-B/5. The overall richness of these burials also suggests that their deaths stimulated both the termination of their contemporaneous architectural occupations and the construction of new Structures. These individuals should not be unquestionably linked to the primary Zubin family, but such a connection does seem conceivable.

Burial A1-B/4. Burial A1-B/4, an axially aligned head cist (see Welsh 1988), was recovered from Unit A1-3 from the area directly above the earlier A1-B/6 interment (see Figure 4.3). This grave had been cut into the A1-2nd architecture between the fill retaining wall and the platform facing wall (see Figure 4.8). Contemporaneous with the previously discussed Burial A1-B/5 (675-750 A.D.), this associated burial was far simpler with regard to construction. The grave itself, oriented north-south, consisted of a series of small limestone uprights surmounted by capstones. These components were arranged around the head and shoulders of the individual, the rest of the body being covered by a moderately compact deposit of grey-brown sediments containing medium percentages of pebble sized clasts (0.4-6.4 cm). The top of the capstones was ca. 3.51 m below the trench datum. The base of the interment was encountered at 3.94 cm, thus the head cist was roughly 43 cm high. A ca. 20 cm deposit of greyish sediments, containing medium percentages of pebble sized clasts (0.4-6.4 cm) was discovered between the base of Burial A1-B/4 and the capstones for the earlier A1-B/6 burial.

The floor of Burial A1-B/4 was ca. 1.74 m long and ca. 52 cm wide. Even though the sediment deposited over much of the body would have provided an anaerobic environment, preservation of the remains was poor (Figure 5.22). However, enough bone remained to indicate that the individual had been placed in an extended, prone position, head to the south, arms at the sides, legs possibly crossed at the ankles. Poor

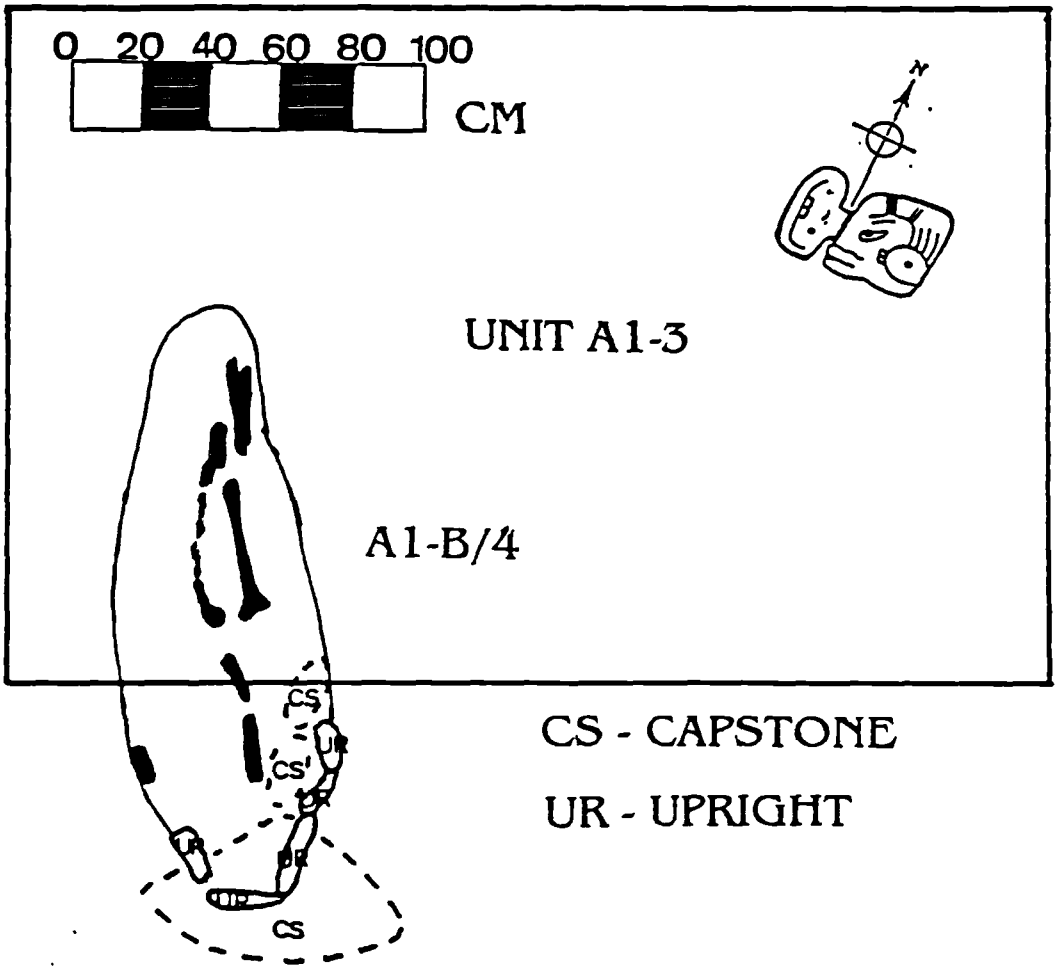


Figure 5.22. Top Plan of Burial A1-B/4.

preservation prohibited gender and age determinations No grave goods were recovered from this burial. The prone position, lack of grave goods, and association with Burial A1-B/5 may indicate that this was a sacrificial offering. As the grave was intrusive into the earlier A1-2nd structure the offering may be considered terminal, although the ritual involved must also be considered dedicatory to the new A1-1st construction (Becker 1992).

Burial A1-B 3. Burial A1-B/3 seems to represent a non-dedicatory sacrificial deposit focusing on Structure A1-1st (see Figure 4 3). This axially aligned interment, classified as a haphazard cist following Welsh's (1988) definitions, was a multiple burial capped by the terminal courtyard floor. Consisting of five individuals (see Figure 5.23), this grave was oriented north-south in front of the A1-1st basal stair (see Figure 4.10). The grave itself consisted of a haphazard arrangement of roughly hewn limestone slabs placed over and around the upper individual (Individual #1, Figure 5.23a). The top of the capstones was encountered at ca. 4.67 cm below the trench datum. The grave cut intruded through the A1-1st/A1-2nd, A1-3rd, and A1-4th courtyard floors, its base coinciding with the Level 6 courtyard surface (5.33 cm below the trench datum). The burial was thus 66 cm in height. Outside of the burial, to the east, two large sections of a sizeable Belize Red: Belize Variety bowl (A1-SF/266) were discovered (at. ca. 4.60 m below the trench datum). This partial cache was placed in association with the A1-B/3 burial, as is attested by the fact that other sections of the same vessel were interspersed amongst the human remains within the grave proper.

Considering the proximity to the surface, the human remains were rather well preserved. The upper individual (Individual #1) was exposed directly beneath the capstones, covered by a compact layer of greyish sediments. Individual #1 was in an extended, prone, position, head to the south and hands near the pelvis The face rested upon a large limestone boulder Sections of the Belize Red bowl were recovered from near the feet and adjacent to the right shoulder. Subsequent osteological analysis indicated that this individual was a 30-45 year old male, 5'0"-5'3" in height. The cranium exhibited deformation in the form of slight occipital and frontal flattening, and all six anterior maxillary teeth were filed (Type C3; Romero 1958)

Individual #2 (Figure 5 23b) directly underlay Individual #1. Preservation was again very good. The second individual had been placed in a similar extended, prone position, head to the south. However, the arms were extended at the sides. The upper portion of the cranium intruded under, and was thus slightly protected by the large

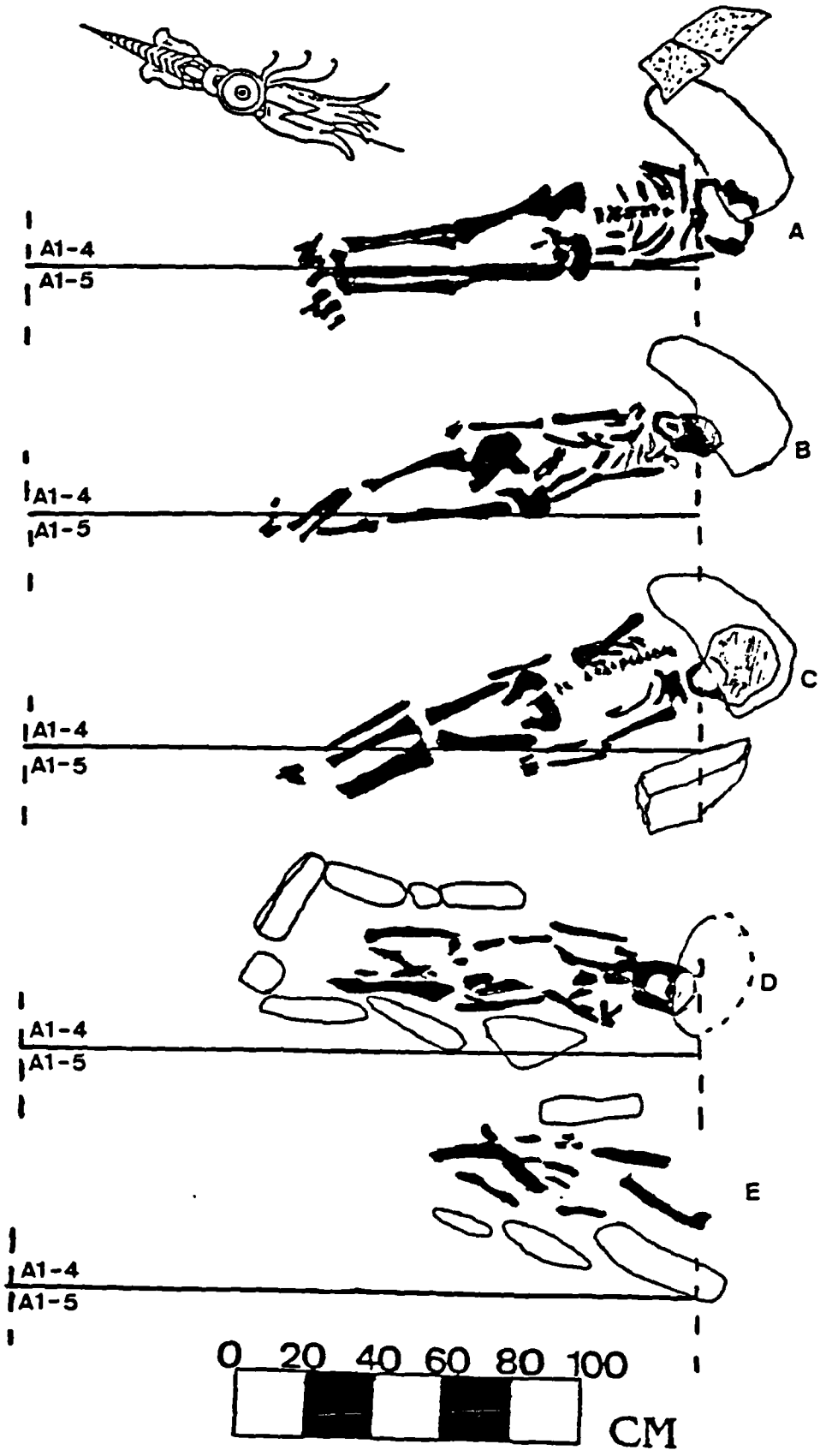


Figure 5.23 Top plan of the five superimposed individuals from the A1-B/3 multiple burial: (a) individual #1; (b) individual #2; (c) individual #3; (d) individual #4, (e) individual #5.

limestone boulder which has previously been discussed Sections of the Belize Red vessel were again found interspersed with the human remains The ensuing osteological analysis indicated that this individual was an 18-25 year female The cranium of this individual again exhibited cranial deformation in the form of slight occipital and frontal flattening. Filed teeth were also present, and included a maxillary left central incisor (Type B4; A1-SF/253), a maxillary right central incisor (Type B4, A1-SF/254), a maxillary right lateral incisor (Type C3, A1-SF/255), a maxillary right canine (Type C3; A1-SF/256), and a mandibular right lateral incisor (Type A1; A1-SF/257).

Individual #3 lay closely beneath Individual #2. Preservation of the remains was again quite good. The individual was in a similar extended, prone position, head to the south and arms at the sides (Figure 5.23c). The cranium was fully covered by a large limestone slab, the head of the previous individual having intruded partially beneath the same Portions of the Belize Red bowl were again encountered. Osteological assessment of the remains indicated that the individual was probably a male of young to middle adult age. One filed tooth, a maxillary left central incisor (Type B4; A1-SF/258), was found in close proximity, and may derive from this individual.

Individual #4 lay directly beneath Individual # 3, within a smaller cist outlined by cut limestone cobbles (6.4-25.6 cm). The body itself was well preserved, and had been placed in an flexed, prone position, the lower legs having been bent backwards at the knees (Figure 5.23d). The arms were extended at the sides, and the cranium was partially covered by the previously mentioned limestone block. Sections of the Belize Red bowl were again recovered. Analysis of the remains suggested that this individual was probably a male of 14-20 years of age. One filed tooth, a maxillary right central incisor (Type B4; A1-SF/259), was found in association with this individual. However, its close resemblance to the previously discussed filed tooth recovered from Individual #3 (Schwake 1995) suggests that it may have worked itself down to the Individual #4 level, having originated with the upper Individual #3. In association were bones of at least one more individual, represented by six extra teeth and fragments of more robust long bone fragments.

The final individual (Individual #5) was found laying on the Level 6 courtyard floor (Figure 5.23e), within the confines of the smaller cist which had surrounded Individual #4. These remains were fragile, but can still be considered well preserved. Indications are that the head was to the south. No Belize Red sherds were found in proximity to this lower individual. The ensuing osteological analysis suggested that this

individual was probably an adult male, but preservation precluded more accurate conclusions. The limited number of bones recovered suggest that this basal interment may represent a secondary burial. Secondary burial is a common feature of societies that practice ancestor veneration, for it is the bones that contain the "life-essence" of the deceased individual, the flesh being considered a "polluted" substance (see various papers in Bloch and Parry 1982a; see also McAnany 1995 60-63). The upper four individuals may have been sacrificed to accompany this basal individual to the otherworld. However, the lack of grave goods weakens this proposal. The cranial deformation and filed teeth exhibited by some of the interred individuals does imply some social status, which suggests another possibility. These bones might represent an individual who was not originally from Zubin, but whose bones were "captured", along with the four other individuals. The placement of this burial in the A1 shrine could therefore be associated not with veneration per se, but rather with the notion of harnessing an esteemed enemy's spirit, while denying the enemy's own kin the "life-essence" contained within the bones (Bloch and Parry 1982b:8).

Besides the sherds associated with the Belize Red partial cache, the only significant finds were two jaguar or puma (*Felidae*) lower third molars, laterally drilled (A1-SF/37 [Figure 5.24a] and A1-SF/38 [Figure 5.24b]). These were probably worn as part of a necklace by one of the upper three individuals. Unfortunately, the close proximity of the upper three bodies, and vertical displacement of some of the smaller bones, made it impossible to assign these finds to a specific body. The Belize Red partial cache associates the placement of this A1-B/3 sacrificial offering with the Maxik phase (675-875 A.D.). A narrower time span is suggested, based on the fact that the offering must have been placed soon after the construction of Structure A1-1st. Thus a time period of 675-750 A.D. is implied.

Burial A1-B 1. Burial A1-B/1, classified as a simple crypt following Welsh (1988), was encountered in 1992 during initial excavations in the A1-1st platform (see Figure 4.3). This interment, encountered ca. 164 cm below the unit datum, had been placed in combination with Burial A1-B/2 (see Figure 4.3) within the dry-stone core deposit beneath the A1-1st platform, sometime after its initial construction (675-750 A.D.). Both burials are contemporaneous, and were interred as part of the major construction effort which raised the height of Structure A1 by 3 m. The grave was oriented approximately north-south, and straddled the eastern boundary of Unit A1-2 (Figure 5.25). A number of large roughly cut capstones (limestone) covered the burial.

Figure 5.24. *Felidae* (jaguar or puma?) tooth beads from Burial A1-B/3: (a) A1-SF/37; (b) A1-SF/38 (drawings by Kat Fernand).

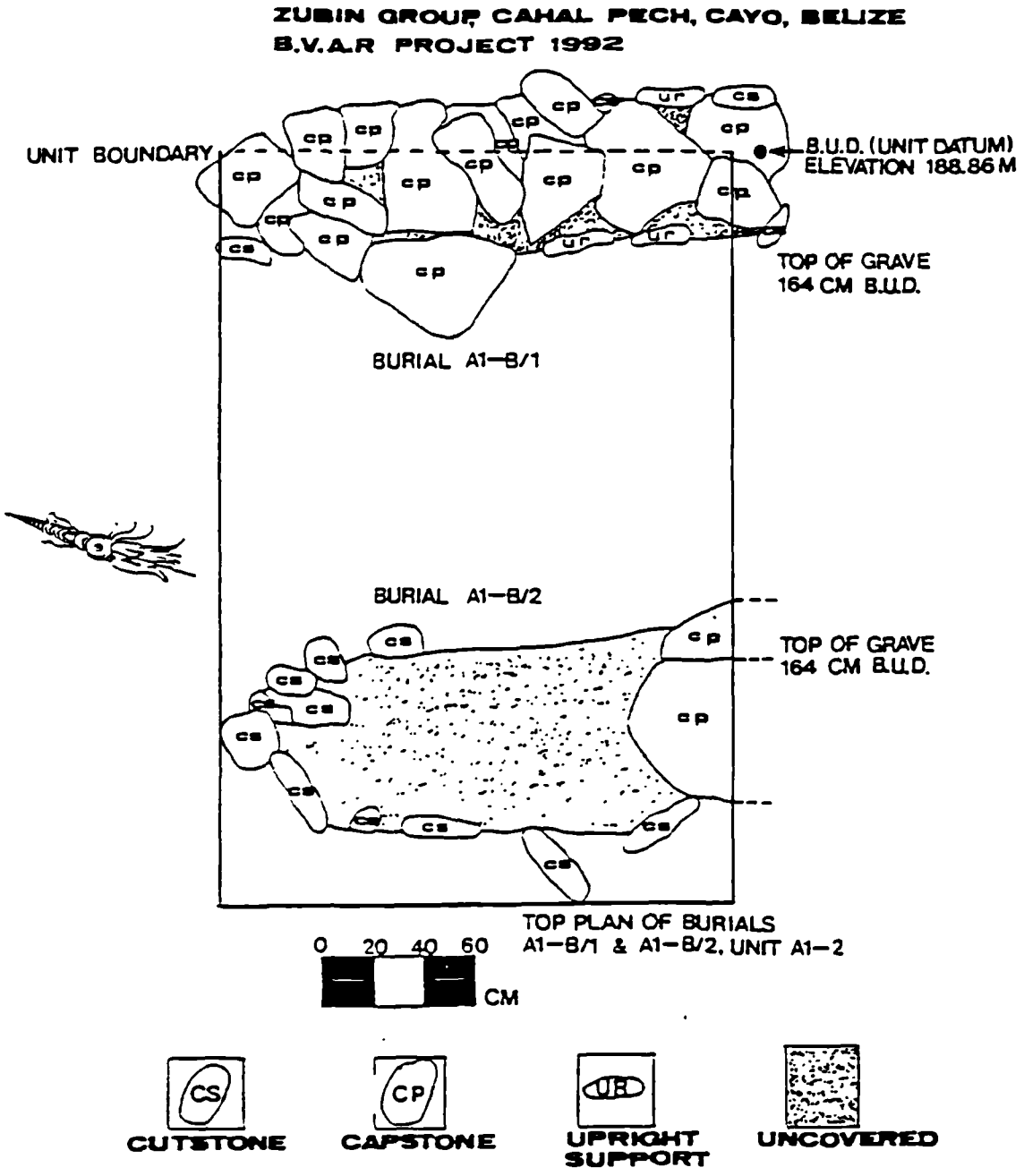


Figure 5.25. Top plan of the Burials A1-B/1 and A1-B/2 grave chambers.

These had been placed flat upon a series of cut limestone uprights The uprights formed a ca. 40-45 cm high wall around the burial. The capstones and uprights combined almost completely enclosed the interred individual. A number of smaller cut-stones had also been used to outline the grave. A ca. 10 cm layer of chert flakes had been deposited on top of the capstones of the grave. This practice has been identified at other sites in the general vicinity (e.g. Conlon and Awe 1991; Healy 1990), and has been linked to Maya cosmology by Coe (1988). The length of the grave was ca. 220 cm (north-south), and it was ca. 60-70 cm wide.

The interment itself consisted of a poorly preserved individual (see Figure 5.26). Skeletal material was scarce, with the exception of some larger sections of arm and leg bones. The position of these, and the presence of a cranial fragment near the southern end of the grave, indicate that the individual had been placed in an extended, supine position, with the head to the south. The poor preservation inhibited osteological assessments of age and gender, although indications are that the individual was an adult. Rodent activity within the confines of the grave was indicated by the presence of numerous rodent bones, particularly prominent in the southern end of the burial.

Burial A1-B/1 grave goods included three vessels (see below), one cylindrical jadeite bead (A1-SF/9, Figure 5.27a), a small spondylus shell bead (A1-SF/8, Figure 5.27b), a drilled canid canine (A1-SF/20), and a drilled canid incisor (A1-SF/19). An Orange-Walk Incised: Orange-Walk Variety bowl (A1-SF/23, Figure 5.28b) had been placed adjacent to the head of the individual. Another Orange-Walk Incised: Orange-Walk Variety bowl (A1-SF/22, Figure 5.28c), and a Dolphin Head Red: Dolphin Head Variety dish (A1-SF/24, Figure 5.28a) were situated at the northern end of the crypt, near the individuals feet. This ceramic assemblage suggests a date of 675-750 A.D. for the interment. A bifacially chipped, quartzite "chopper" (A1-SF/299) was also recovered during excavation of the burial. It appears that the jadeite and shell beads were part of a necklace, as they were located near the chest area of the individual. The drilled canid teeth were recovered during screening of the sediments from the burial. These may have originated from the same necklace as the jadeite and shell beads.

Burial A1-B 2. Burial A1-B/2, axially aligned and oriented north-south, was situated to the west of Burial A1-B/1 (see Figures 4.3 and 5.25). It is best classified as a capped pit following Welsh (1988). The grave consisted of a rough outline of cut-stones, with the exception of a few cut-stone uprights covered over by capstones at the southern end of the grave (Figure 5.26). The depth to the top of these capstones was

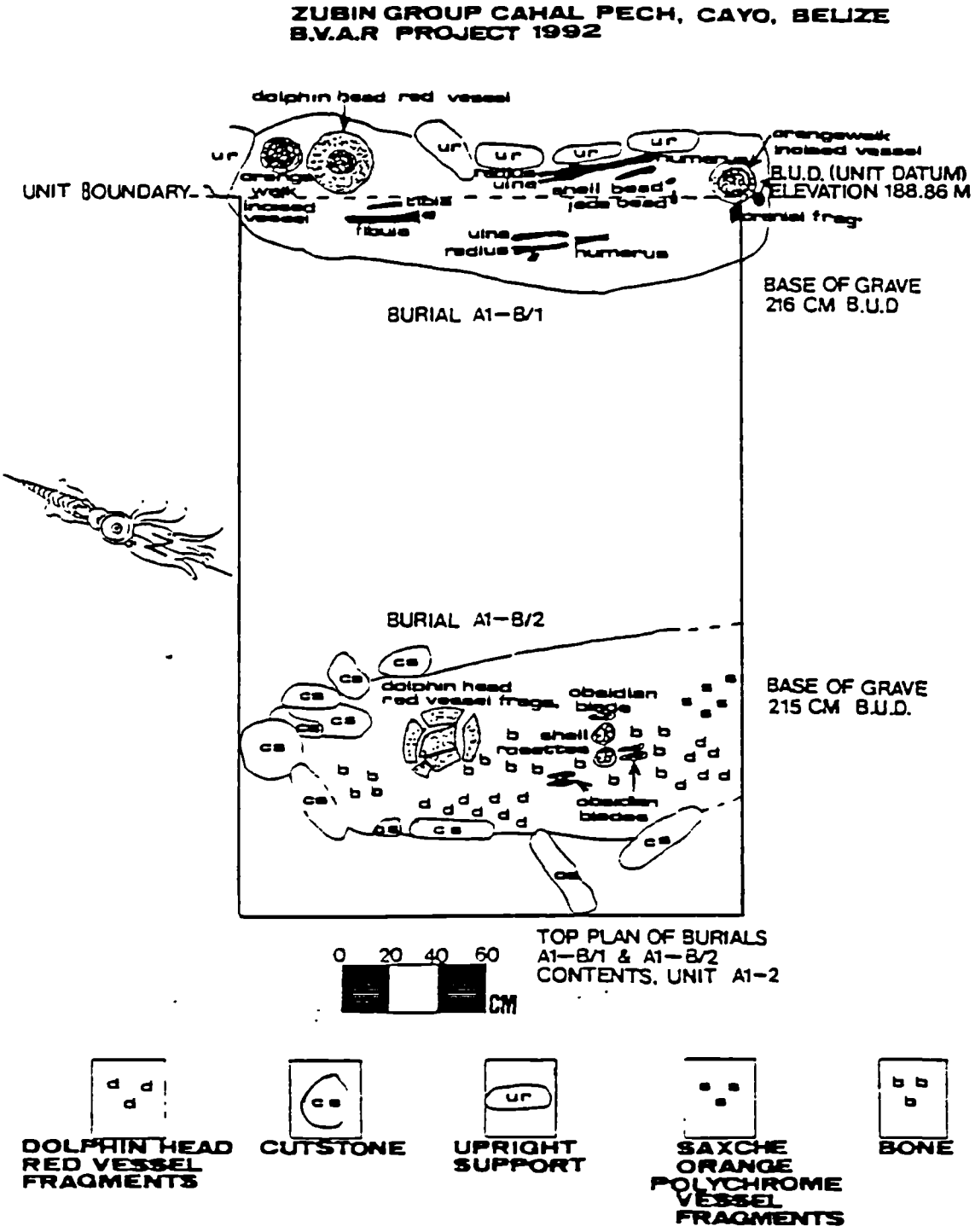


Figure 5.26. Top plan of Burials A1-B/1 and A1-B/2.

Figure 5.27. Grave goods recovered from Burial A1-B/1 (a,b) and A1-B/2 (c,d): (a) cylindrical jadeite bead (A1-SF/9); (b) spondylus shell bead (A1-SF/8), (c) spondylus shell rosette (A1-SF/13); (d) spondylus shell rosette (A1-SF/14, drawings by Ruth Dickau).

Figure 5.28 Ceramic vessels from Burial A1-B/1. (a) Dolphin Head Red: Dolphin Head Variety dish (A1-SF/24); (b) Orange-Walk Incised: Orange-Walk Variety bowl (A1-SF/23); (c) Orange-Walk Incised Orange-Walk Variety bowl (A1-SF/22, drawings by R. Holder)

164 cm Below Unit Datum (B.U.D.). Thus, this second interment was level with burial A1-B/1. Due to the lack of capstones, and the size and looseness of the core masonry above the grave, this burial was very poorly preserved. Excavation was further hampered by a week of rain, promoted by an offshore tropical storm, which settled in almost immediately upon discovery of Burial A1-B/2.

Preservation of skeletal remains was so poor that orientation of the burial could not be determined with any degree of certainty, although indications are that the head was to the south, as it was in Burial A1-B/1. No osteological conclusions could be made. The remains of four ceramic vessels, all of which were subsequently reconstructed, were recovered from the burial (see Figure 5.26). These included three Dolphin Head Red: Dolphin Head Variety bowls (A1-SF/25 [Figure 5.29a], A1-SF/26 [Figure 5.29d], A1-SF/28 [Figure 5.29c]), two of which were situated in the central portion of the burial and the other in the southern sector, and a Saxche Orange-Polychrome: Variety Unspecified bowl (A1-SF/27, Figure 5.29b), also in the southern section. This ceramic collection reaffirmed the date of 675-750 A.D. previously suggested by the Burial A1-B/1 assemblage. Associated grave goods included five obsidian blades (A1-SF/10, /11, /12, /16, /17) and two spondylus shell rosettes (A1-SF/13 [Figure 5.27c] and A1-SF/14 [Figure 5.27d]), all recovered from the south-central area of the interment. Fragments of canid bones were also present within the grave.

CACHES FROM STRUCTURE A4

Level 7

Cache A4-F 5. Cache A4-F/5, a partial vessel cache, had been placed within the Level 7 lower platform fill during its construction (600-675 A.D.; see Figure 4.27). This may represent a combined termination/dedication ritual. The vessel appears to have been an unslipped olla. Given that there were no rim sherds present, these vessel fragments could not be classified as to type. A similar cluster of sherds, possibly another partial vessel cache, was also found within the Level 7 fill in Unit A4-1a These were from an Orange-Walk Incised: Orange-Walk Variety vessel.

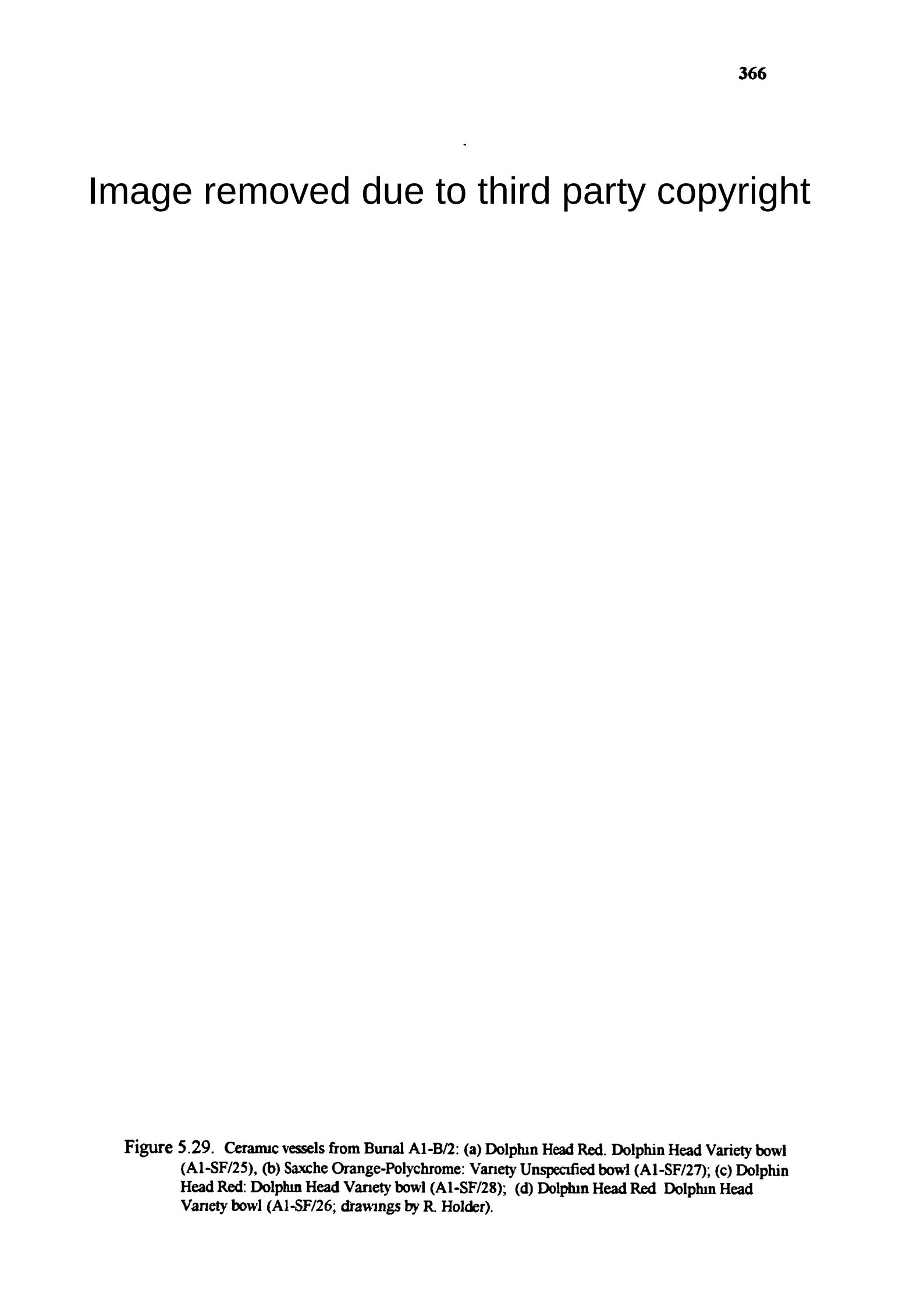


Figure 5.29. Ceramic vessels from Burial A1-B/2: (a) Dolphin Head Red. Dolphin Head Variety bowl (A1-SF/25), (b) Saxche Orange-Polychrome: Variety Unspecified bowl (A1-SF/27); (c) Dolphin Head Red: Dolphin Head Variety bowl (A1-SF/28); (d) Dolphin Head Red Dolphin Head Variety bowl (A1-SF/26; drawings by R. Holder).

Level 6, A4-8th

Cache A4-F 4. Cache A4-F/4, a large termination cache of broken pottery discovered during the excavation of A4-8th, was exposed at 321 cm Below the Structure Datum in Unit A4-2a (Level 6; see Figure 4.27) This cache, consisting of numerous sherds of a very large, unslipped vessel, had been placed on the earlier Level 7 surface prior to the erection of the A4-8th building platform (675-750 A.D.). The vessel type does not conform to any variety within the Gifford Typology, but does appear to be similar to some Late Classic cache vessel forms discovered at the Zopilote Group, south of Cahal Pech.

A4-7th

Cache A4-F 2. Cache A4-F/2, a partial vessel cache, was discovered beneath the A4-7th bench feature (Level 6C) in Unit A4-1a (Figure 4.36). This cache, consisting of a partial Benque Viejo Polychrome: Variety Unspecified bowl with nubin feet (A4-SF/23), and a incomplete Mount Maloney Black: Mount Maloney Variety bowl (A4-SF/150), probably represents a dedicatory offering of some sort. This is postulated, even though the cache is limited to partial vessels, because of the association with the new bench feature and associated building platform floor, as opposed to the earlier A4-8th terrace surface. A date of 675-750 A.D. is suggested by the ceramic assemblage and construction sequence.

A4-6th

Cache A4-F 3. Cache A4-F/3, a partial vessel termination offering (see Figure 4.36), was exposed in the southwestern corner of Unit A4-2 during excavation of the A4-6th upper building platform (Levels 5 and 5B). This cache, consisting of a cluster of sherds from a number of vessels, was found resting on the earlier A4-7th building platform surface (Level 6A) . Thus the offering appears to represent a termination offering focusing on the earlier A4-7th structure. Many of the sherds appear to have derived from a Garbutt Creek Red: Garbutt Creek Variety vessel. This dates the termination of A4-7th, and construction of A4-6th, to the early Maxik phase (675-750 A.D).

A4-4th

Cache A4-F 1. Cache A4-F/1, a partial vessel termination cache, was encountered in Unit A4-3 during excavation of the A4-4th terrace step (see Figure 4.38) This large cluster of sherds was found along the western wall of the unit, adjacent to the upper A4-4th building platform facing wall. The sherds had been placed on the earlier A4-5th terrace step, and subsequently concealed by the construction of the A4-4th terrace. The cluster was of substantial size, literally filling the 16 cm between these two terrace surfaces The assemblage represented a number of vessels, dating to the Xnipek (600-675 A.D.) and Maxik (675-875 A.D.) phases. A date of 675-750 A.D. is therefore likely for the deposition of this feature. Clearly, this was some type of termination offering focusing on A4-5th, although the ritual activity was obviously also connected with the dedication of the new A4-4th structure.

MISCELLANEOUS HUMAN REMAINS FROM THE *AC* COURTYARD

Unit A1-1, Level 6, Floor IV

Miscellaneous Human Remains. A fragment of a human maxilla with a portion of canine root and empty premolar socket was found alongside a maxillary right canine. Associated with these remains was a section of zygomatic arch, and two cranial vault fragments. These materials derived from the dark Level 6 sediments near the western boundary of the Unit A1-1 (see Figure 4.14). It is likely that the remainder of the burial, if these remains constitute such, are located to the west of Unit A1-1. A date of 650-350 B.C. is suggested by the ceramic assemblage and construction sequence.

CACHE FEATURE FROM THE *BAC-HA* COURTYARD

Unit A2-1, Level 2

Cache A2-F 1. Cache A2-F/1, an apparent dedicatory cache lying directly upon the sustaining surface (Level 3, Floor I) beneath the Level 2 stairside, was discovered upon removal of the stair face and backing masonry (see Figure 4.47). This cache contained a number of broken ceramic sherds representative of the Maxik phase, Dolphin

Head, Mount Maloney, and Cayo Ceramic Groups. A date of 750-875 A D. is suggested for placement of this feature Three "general utility bifaces" (A2-SF/3, /4, /5; see Figure 4.49) where also included with the offering. According to Ball and Taschek (1986.39), three biface caches are a "cultural fingerprint" found at both the minor centre of Nohoch Ek, and the smaller Guerra site. Unfortunately, they do not elaborate beyond this.

BURIAL REMAINS FROM STRUCTURE C9

Level 1A, Looter's Trench

Miscellaneous Human Remains. The disturbed remains of at least one individual were found interspersed throughout the looter's backdirt deposit (Level 1A) in Structure C9. Due to the highly disrupted nature of this interment, a grave type could not be ascertained. Although some likely grave goods (e.g. jadeite beads, conch shell beads, greenstone triangulates) were also found within the looter's backdirt deposit, none of these can be firmly assigned to the burial. Analysis of the human remains indicates that the individual was an adult, but no gender determination could be made.

Level 7, C9-6th

Burial C9-B 1. Burial C9-B/1, portions of which were exposed in the western wall of the looter's trench (see Figure 4.66), constitutes the earliest interment discovered at Zubin. Due to its precarious location within the looter's trench wall, there was no possible way to fully expose this interment. Efforts to do so, by first excavating into the wall above the body, and subsequently down onto it, proved somewhat successful at first. This method permitted the exposure of the left side of the cranium, mandible, and rib cage, as well as the left humerus, ulna, radius, carpals, metacarpals, phalanges, and upper femur. Unfortunately, because the looters had undercut this interment, the wall itself was prone to collapse from the outset. Eventually, a large section of the wall gave way, falling directly upon the author while in the midst of exposing portions of the interred individual's upper body. This occurred prior to mapping, thus no plan exists for Burial C9-B/1 The collapse was substantial enough to not only completely destroyed the burial "context", but also demolish many of the bones that had been exposed. Further

excavation of the remaining bone sections was not taken up due to obvious safety reasons. Following the collapse, bones were collected and taken back to the lab for assessment. Fortunately, the excavations had been extensive enough before the wall failure to allow some conclusions to be drawn concerning this interment.

It was clear from the outset that Burial C9-B/1 had been placed directly on top of the earlier C9-7th upper platform surface, in conjunction with the construction of the new C9-6th structure. The interment of this individual was thus closely connected with the termination of use of this earlier C9-7th architecture, as well as with the dedication of the new C9-6th structure. A date of 650-350 B.C. is suggested by the ceramic assemblage and construction sequence. The body was surrounded by fill, implying that it is best classified as a "simple" burial, following the Welsh (1988) typology. Preservation of the remaining sections of bone was good to excellent. The looters had destroyed the majority of the lower portion of the body, thus making it impossible to assess whether the individual was in an extended position or not. However, the left arm was extended at the side, and this is the likely position of the right arm. Thus, the overall body position suggests that the legs were also extended. The body was supine (ventral surface up), with the head to the north, facing west.

Given the associated architecture, it is apparent that the burial was axially aligned with both the C9-7th and C9-6th structures. Grave goods discovered during the limited excavations included a barrel-shaped jadeite bead (C9-SF/23), and two greenstone triangulates (C9-SF/40 [Figure 5.30] and C9-SF/41 [Figure 5.31]). These were all found near the chest area. After the wall collapse an intact section of the left rib cage was taken back to the lab, were it was removed from its surrounding dirt matrix. During this process two conch shell beads (C9-SF/62 [Figure 4.67g] and C9-SF/63 [Figure 4.67h]) were retrieved, obviously also from the chest area. It is also plausible that that some of the special finds recovered during the screening of the re-excavated looter's backdirt (Level 1A) were originally grave goods associated with this individual.

Figure 5.30. Greenstone "triangulate" from Burial C9-B/1 (C9-SF/40; drawing by Gyles Iannone).

Figure 5 31. Greenstone "triangulate" from Burial C9-B/1 (C9-SF/41; drawing by Gyles Iannone).

SUMMARY

The cache and burial deposits discussed in this chapter provide a multifaceted data base reflective of over 1200 years of ritual activity. The location, elaboration, and contents of such features provide important clues for understanding intra- and intersite social relations. In the following chapter (Chapter 6) this data will be combined with that presented in Chapter 4, and Appendix III to facilitate the formulation of a developmental model for social organisation at Zubin. Within this discussion the temporal trends reflected in the caches and burials will be presented in detail.

CHAPTER 6

A DEVELOPMENTAL MODEL FOR SOCIAL ORGANISATION AT ZUBIN

> *It is a caveat that the community cannot be understood in isolation from the region, but it is also true that we cannot fully apprehend developments on an interregional scale - nor will generalisations of this scale ever have long-lived utility - without better understanding of development and integration at the level of the community or site* [Graham 1987.763].

A tentative model for ancient Maya social organisation was outlined in Chapter 2. It is accepted, however, that this formulation requires more detailed examination in order to assess its validity. In order to do so it is a prerequisite that more perceptive intracommunity and microregional models be developed. It is only after such models are in hand that one can begin to formulate and refine more extensive societal generalisations. This chapter presents a developmental model for social organisation at Zubin. The various "bundled continua of power", as outlined in Chapter 2, will be employed to break up the data into manageable units for discussion. Ceramic phases will be utilised to further divide the data into temporally significant units, and thus facilitate a temporally sensitive analysis.

Admittedly, the present analysis is not as detailed as I would have liked, or is possible using the comparative method outlined in Chapter 2. This predominantly reflects the thesis regulations. Due to the restrictions of the word limit, a detailed microregional analysis could not be conducted. However, it is hoped that future contexts will permit such a comparative examination. Notwithstanding the preliminary nature of the present analysis, it still permits the recognition of ranked statuses, castes, strata, factions, and corporate groups, and therefore provides some reliable insights into ancient Maya social organisation within the Cahal Pech microregion

CUNIL PHASE (1200-900 B.C.) SOCIAL ORGANISATION

Although a few Cunil phase (1200-900 B C) sherds were recovered during excavations at Zubin, no evidence exists to suggest anything more than ephemeral use of the site at this time. Fortunately, the rich Formative period deposits at nearby Cahal

Pech provide some insights into Cunil phase (1200-900 B C.) social organisation. Awe (1992:344-350) has presented solid data which suggests that status differences existed at Cahal Pech during this time. This is evidenced by the power to acquire high quality, exotic trade goods, the ability to procure iconographic items, the presence of well-made, decorative ceramic wares, and the "conspicuous disposal" of wealth in large caches Not only do these activities suggest that ranked status differences were developing within the Cahal Pech site core at this time, they also imply the presence of corporate group competition (see Chapter 2) . Such competition calls for conspicuous displays of power, such as the procurement and ritual disposal (caching) of exotic trade items. The presence of figurines might also be taken to suggest that rituals associated with ancestor veneration were being conducted at the site (see Awe 1992:284; Grove and Gillespie 1984). These rituals may have been employed as legitimising rites by the Cahal Pech residential corporate group. Such rituals are often utilised to reaffirm connections to a particular locus.

The presence of well-made ceramic serving dishes (see Awe 226-231) might also be taken to suggest another important corporate group activity, competitive feasting. Evidence from the Cahal Pech faunal assemblage provides further evidence that feasting may have been carried out at this time. Awe (1992:349) argues that the prevalence of bones derived from choice cuts of meat (deer hind legs) is indicative of the presence of comparatively high status individuals. The clustering of these bones within a restricted context (Structure B4) might therefore be considered suggestive of competitive feasting. Awe (1992:345) has also noted that during the Cunil phase (1200-900 B.C.) freshwater clams (*Nephranaias ortmanni)* were a likely dietary supplement for the inhabitants of the Cahal Pech site core. Concomitantly, he presents data to suggest that freshwater *jute* (*Pachychilus indiorum* and *Pachychilus glaphyrus*) were also a food source, as evidenced by their breakage for removal of the "meat". In pondering the use of such food stuffs, it is tempting to suggest an alternative hypothesis for their use. It seems plausible that the freshwater shellfish could have been employed in feasting, rather than as everyday dietary supplements. This follows recent work by Hayden (1990), in which non-staple foods (often those requiring more energy to procure than they provide to the diet) are regularly employed within social transactions such as feasting. Although Blanton and Taylor (1995) have recently shown that staple foods can also be effectively employed in such social transactions, through an increase in production, it would seem that the freshwater shellfish in question are best classified as non-staples. It is plausible,

therefore, that the freshwater shellfish are indicative of competitive feasting, a social transaction aimed at strengthening corporate groups bonds and compounding status differences. These faunal remains may thus provide an inferential clue to the types of reinforcing activities employed by the Cahal Pech residential corporate group during its initial stages of consolidation.

In sum, there exists evidence for the limited development of ranked statuses during the Cunil phase (1200-900 B.C.). Corporate group competition also appears to have been quite active. That evidence for these social units is restricted to Cahal Pech suggests that powerful corporate groups may have been restricted in their distribution at this time, and that factional competition had yet to become a common place occurrence.

EARLY FACET KANLUK PHASE (900-650 A.D.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

No burials were recovered from the Zubin deposits dating to this phase. Thus, it is impossible to assess osteological, paleopathological, and demographic trends. Faunal remains were also scarce, although this partially reflects the restricted excavations within deposits dating to this phase. In general, vertebrate remains are rare in Formative period contexts at Zubin, but remains of freshwater shellfish do occur in limited numbers (Stanchly 1993, 1994, 1995a). This undoubtedly reflects differential preservation. It should be restated that although these freshwater shellfish may have been dietary supplements (Healy et al. 1990; Stanchly 1995a:174), it is also plausible that they were employed as feasting foods by the Cahal Pech residential corporate group. This notion is reaffirmed by their presence at Zubin, a site that appears to have ritual functions during this phase, but no corresponding residential occupation.

Mortuary Data

No burials were recovered from the Zubin deposits dating to this phase.

Artefacts: Status Markers

No status markers were recovered at Zubin from deposits which could be dated to this phase.

Cache Data

No early Kanluk phase (900-650 B.C.) caches were recovered from Zubin

Artefact Data: Domestic Architecture

No "domestic" or "residential" architecture appears to have existed at Zubin during this phase. The lack of domestic/residential occupation is also confirmed by the absence of metates, manos and obsidian blades. The dearth of obsidian blades also lends credence to Awe and Healy's (1994) postulation that obsidian blade technology did not come into use in the upper Belize River region until the subsequent late Kanluk phase (650-350 B.C.).

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

With the exception of a possible figurine leg fragment, no iconographic, epigraphic, wealth, or craft specialist data was recovered from early Kanluk phase (900-650 B.C.) deposits at Zubin. The figurine fragment, which may be considered both an iconographic element (i.e., ancestor veneration; see Awe 1992:284; Grove and Gillespie 1984) and a craft specialist item, was probably introduced to the site from outside as part of the dedicatory ritual associated with the construction of Structure C9-8th. It is plausible that this item reflects ancestor related rituals conducted by members of the Cahal Pech residential corporate group, rather than any in situ, localised actions by a Zubin residential corporate group. Indications are that Zubin was not inhabited at this time, implying that C9-8th was a shrine structure constructed by the Cahal Pech corporate group in an attempt to consolidate its power and expand its factional alliances (see below) Thus, the figurine fragment may have been interred by the Cahal Pech residential corporate group as part of a long standing ancestor veneration ritual employed to consecrate sacred space in conjunction with the erection of ritual architecture.

Settlement Data

With the exception of the C9-8th apsidal shrine structure, no other early Kanluk phase (900-650 B C.) settlement was recognised at Zubin. The absence of residential architecture, coupled with the paucity of domestic artefacts (manos, metates, obsidian blades), indicates that the site saw limited occupation, if any, at this time. The construction of C9-8th is probably attributable to the primary Cahal Pech residential corporate group, who were both solidifying their corporate strength, and formalising their embryonic factional ties, by delineating sacred space, and by association economic and political space, around the larger centre. The prominent Zubin hill, located due south of the Cahal Pech site core, would undoubtedly have been recognised as a fitting place for a structure of this type (see below).

Architecture Data: Residential

No residential architecture appears to have been constructed at Zubin during this phase.

Architecture Data: Non-Residential

As indicated above, the C9-8th apsidal shrine appears to have been the only structure at the Zubin locus during the early Kanluk phase (900-650 B.C.). The construction of this shrine structure must therefore be attributable to another social group, likely the residential corporate group at Cahal Pech. Its construction probably coincided with the strengthening of the primary Cahal Pech residential corporate group, and the initial formulation of the broader microregional faction centred at this site The embryonic nature of the factional relations is attested by the limited energy expenditure exhibited by the Zubin architecture The raw materials did not include plaster, and the roughly hewn cobbles and dirt fill could have been produced locally with relatively little effort. No evidence for a superstructure was recognised The resulting shrine structure, being of poor to moderate quality and limited size, reflects the tentative nature of the Cahal Pech factional alliance at this time. That this structure was constructed at such a prominent location, however, attests to the strength of the emergent Cahal Pech

residential corporate group, and the increased control it had over its immediate land resources.

That the Zubin locus was chosen for a shrine may reflect a number of interconnected factors. Many of these are grounded in concepts related to sacred landscapes, a topic which has been tackled by a number of Mayanists over the years (e g. Garber 1994; Vogt 1970.108). First, that Zubin is situated on top of a prominent hill suggests that this location might have been viewed as a sacred mountain (Miller and Taube 1993:119-120; Vogt 1970:108; see also Thompson 1970:261), or *Witz* (Schele and Miller 1986·429; Schele and Freidel 1990 71). Within Mesoamerican cosmology both mountains *and* hills (Vogt 1970:4) are regarded as homes of the ancestors (Freidel and Schele 1989:233; Schele and Miller 1986:432; Schele and Freidel 1990:121; Vogt 1970:4, 108; Von Zantwijk 1981:71). As Miller and Taube (1993:120) indicate, "from early times, mountains frequently determined the siting of communities." Second, it is understood that the cardinal and intercardinal directions also played an important role within Mesoamerican cosmology (Freidel et al. 1993:72-75, 419; Garber 1994; Miller and Taube 1993:77; Vogt 1970:108). Hanks (1990:299-300) has stated that "the cardinal points are defined as regions containing specific, named places " Thus, the Zubin locus might have been imbued with additional significance, and an identity as a "named place", given the fact that it lay roughly due-south of Cahal Pech.

In combination, the significance of these cosmological traits must have made Zubin an attractive choice for community rituals. In discussing the contemporary Zinacantan Maya, Vogt (1970:98-99) has underscored the importance of the ritual "pilgrimages" that are made to sacred mountains during community based "year renewal ceremonies." In related work in the vicinity of Momostenango, Barbara Tedlock (1982:82) has described how ritual circuits are linked to "the mountains associated with the cardinal directions." She concludes that these rituals facilitate "the firm placement of the town within its four mountains", and that this activity leads to the "stabilisation of the town."

Besides the various ritual circuits within which the Zubin locus may have played a significant role, it is also probable that the initial use of the location may have related to the symbolic activities associated with the "creation of the universe". Specifically, the process of symbolically "partitioning the universe", through the use of the eight cardinal and intercardinal directions, and the "centre", provides a plausible ritual activity which may have been undertaken to create the sacred space that became Zubin. This ritual was

concerned with "the staking out and partitioning of the great house that defines the universe" (Garber 1994 44; see also Freidel et al. 1993:72-75). As Garber (1994.39-40) has argued, "though proximity to water and arable land no doubt played a major role in the positioning of ceremonial centres, it was the partitioning of the landscape, during the Middle Formative, that gave certain locations the legitimacy to develop as major centres of ritual activity." Not to downplay the weightiness of these symbolic beliefs and deeds, it must be emphasised that these ritual activities would have also brought some very tangible socio-economic (e.g. formalised control over an *economic*, as well as sacred landscape), and socio-political (e.g. a degree of formalised control over populations within the sacred landscape), benefits to the Cahal Pech residential corporate group. Power over this sacred location can be seen as a reflection of increased residential corporate group strength, and a concerted effort to expand factional allegiances.

Labour Data

The labour involvement at Zubin during this time period, as expressed primarily by the C9-8th shrine structure, does not suggest a highly organised and taxing effort. However, because it is unlikely that there were any significant numbers of inhabitants at the Zubin locus during this phase, the labour relations that were involved take on more importance. It appears plausible that the Cahal Pech residential corporate group, in order to both strengthen itself, and broaden its domain through faction building, employed community contractual and/or festive custodial labour to both construct the non-residential architecture at Zubin, and bring about the rituals associated with this architecture. Similar labour relations were also likely involved in the production of the non-basic resources associated with these rituals.

Summary: Microregional Social Organisation in the Early Facet Kanluk Phase

Awe (1992:350-352) outlines evidence to suggest that status differences at Cahal Pech increased during the early Kanluk phase (900-650 B C.) He notes that the overall quality of architecture improved at this time. This implies that more labour was invested in construction methods. Awe also notes that trade in exotics continued at a significant level. It is notable that the first non-residential structure was constructed at Cahal Pech during this phase. This was likely a small shrine, as cache features were associated with

it. That figurines continued to be prevalent in early Kanluk phase (900-650 A D) deposits may reflect the persistence of rituals associated with ancestor veneration. All of this data attests to the presence of ranked statuses within the Cahal Pech site core. Concomitantly, it also represents an increase in the types of activities generally associated with corporate group competition. Thus, it would appear that by the early Kanluk phase (900-650 A.D.) the Cahal Pech residential corporate group had both achieved a certain degree of solidarity, and reached a significant level of power and influence within the microregion.

This surge in power may have partially come from success in corporate group competition. In addition, the appearance of a sizeable support population in the Cahal Pech periphery must have added to the residential corporate group's power base. Control over this population must have come about through faction building. Whereas the shrine structure constructed within the Cahal Pech site core may have been aimed at consolidating residential corporate group strength, shrines such as the one erected at Zubin must have been established in efforts to cultivate a broader factional power base. Thus, the construction of the small shrine at Zubin may have been undertaken by the residential corporate group at Cahal Pech in order to extend their hegemony over a larger landholding, and support population. That this was a tentative effort is suggested by the nature of the architecture that was employed (i.e., ritual/shrine). Clearly, this was predominantly ideological conversion (see above), as opposed to an administrative, strong-arm tactic. The indecisive character of this act is confirmed by the comparatively poor quality and limited size of the resulting Zubin structure. In sum, ranked statuses, corporate groups, and factions were likely present within the early Kanluk phase (900-650 B.C.) social landscape.

LATE FACET KANLUK PHASE (650-350 B C.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

Burial C9-B/1, discovered within the looter's trench in Structure C9, dates to the late Kanluk phase (650-350 B C.). This interment provides some limited osteological, paleopathological, and demographic data for the site (see Schwake 1996). Analysis indicates that these remains derive from an adult male. Evidence for childhood nutritional inadequacies, or disease stress, was noted in the tooth assemblage. Signs of

inflammatory response on two fragments of parietal bone also suggest that the individual suffered from a period of infection later in life Some dietary data has also been gleaned from the preliminary faunal analysis. Shellfish were more prevalent than vertebrate remains (Stanchly 1993, 1994, 1995a). This probably reflects differential preservation rather than dietary preference. It should be reiterated that these freshwater shellfish were potentially employed as feasting foods, as well as dietary supplements (Healy et al 1990). This is suggested by the fact that no evidence for residential occupation was recognised for this phase, implying that Zubin was primarily a ritual locus at this time.

Mortuary Data

The only Zubin burial which dates to this phase is Burial C9-B/1. That the interment coincided with the erection of a new shrine structure (C9-6th) suggest that a fair amount of energy was spent on the mortuary ritual. However, little energy was expended in the construction of the grave proper, the individual having simply been placed on the earlier C9-7th platform and covered over by the C9-6th fill deposit (i.e., Welsh's 1988, "simple grave"). This burial was partially disturbed by looters, but it does not appear that it included large amounts of grave offerings. One jadeite bead, two greenstone triangulates, and two small conch shell beads were the only grave goods recovered during excavations.

Although limited in number, the grave goods were of a variety of raw materials, and considering the restricted distribution of such items during this time period, all may be considered "high status" items. Workmanship is not extraordinary, but all three raw materials are high quality, and exotic in origin. There is no evidence to suggest that the grave goods were produced at Zubin, but, with the exception of the jadeite bead, which may have been manufactured outside of the region, indications are that these items may have been produced within the upper Belize River region.

Although the conch shell itself is exotic in origin, the beads themselves may have been manufactured within the Cahal Pech microregion. Large quantities of conch shell detritus, manufacturing tools (e.g. burins), and some beads of this type have been found in early Kanluk phase (650-350 A.D.) contexts at the Cas Pek group (Lee and Awe 1995, Sunahara and Awe 1994; see Figure 3.3). This locus may therefore be the origin of the Zubin beads. It is probable that these items, made as they were from an exotic raw material, were manufactured at Cas Pek under the order or patronage of the more

powerful Cahal Pech residential corporate group An artefact of this type could have been distributed as social currency during faction building. It is therefore plausible that their presence in Burial C9-B/1 reflects some sort of affiliation (corporate group or factional ties) with the Cahal Pech patrons.

Little is known of body positioning during this time period. The supine position of Burial C9-B/1 might be considered a reflection of higher status when compared to prone burials, as this appears to be the case during the later Zubin occupations (see below). However, a roughly contemporary burial at Barton Ramie also exhibited a supine position, suggesting that this may reflect regional trends (Welsh 1988, Table III). Similarly, the orientation of the head to the north, towards Cahal Pech, might be taken to suggest some affiliation with the residential corporate group at the latter site, and thus higher status. However, all of the roughly contemporary burials at Barton Ramie were interred with the head to the north (Welsh 1988, Table III). Thus, this practice may once again reflect regional preferences, rather than microregional alliances (and by association status position).

It remains plausible, however, given both the significance of this grave location (i.e., a shrine), and the apparent absence of any residential structures, that this individual was a religious practitioner who was allied to the Cahal Pech residential corporate group. A likely scenario is that this individual undertook rituals to formalise and strengthen the emerging factional alliances focusing on the larger site. In the absence of evidence for a strong residential corporate group at Zubin itself, this scenario would explain not only the placement of the individual within the shrine structure, but also the *relative* richness of the grave goods. Unfortunately, this must remain a hypotheses until a larger comparative sample of burials from this time period becomes available for contemplation.

Only one other possible late Kanluk phase (650-350 B.C.) burial was encountered. These remains, consisting of a fragment of a human maxilla with a portion of canine root and empty premolar socket, a maxillary right canine, a section of zygomatic arch, and two cranial vault fragments, were recovered from within the raised platform fill in the *Ac* Plaza (Unit A1-1, Level 6, Floor IV). Although the entire burial was not excavated, as it lay outside of the excavation unit, its presence in this context does suggest that this portion of the site was also considered sacred space.

Artefacts: Status Markers

In this discussion "elite" items refer to those artefacts that reflect the highest status positions, whereas "sumptuary" items are those which reflect status positions of a lesser order (Wason 1994. 103-104). A limited number of potential "status" items were recovered from late Kanluk phase (650-350 B.C.) deposits at Zubin. All were manufactured from exotic, high quality raw materials. However, none exhibit high quality workmanship, or can be considered overly intricate. Whether these items can be considered "elite" (indicators of the highest statuses), or simply "sumptuary" (status items of a lesser order) can only be determined by future comparison with the other groups in the microregion. Nine small conch shell beads date to this time period. As indicated above, although this raw material is exotic in origin, these items were probably produced locally at the Cas Pek group (Lee and Awe 1995; Sunahara and Awe 1994; see Figure 3.3), by order of the Cahal Pech residential corporate group. It appears as if they were distributed as social currency within the Cahal Pech faction. Their presence might therefore be taken to indicate status within the faction itself. Although the sample is too small to determine conclusively if these items were restricted primarily to the upper echelons of the social spectrum ("elite" status items), or whether they exhibited a broader distribution (sumptuary goods), their presence does seem to indicate higher status. Two were obtained from Burial C9-B/1, thus indicating the high status and factional affiliation of this individual. One was recovered from looter's backdirt, and six others were retrieved from construction fill within the Structure C9 shrine. These contexts attest to the importance of such items in dedicatory rituals at Zubin, and again confirm both this structure's close connection to the Cahal Pech residential corporate group, and its importance in intrafactional social relations.

Other status items include jadeite beads, five of which where found at Zubin in late Kanluk phase (650-350 A.D.) deposits. It is not possible to determine whether these artefacts were produced within the microregion, but it is definite that the raw material is exotic. Given their value as social currency, these items may have been employed by the Cahal Pech residential corporate group to strengthen its social standing and build its factional alliances One of these beads was interred within Burial C9-B/1, possibly reflecting this individual's factional, and potentially residential corporate group affiliation with Cahal Pech. The other four jadeite beads were found within the Structure C9 construction fill, indicating that these status items were also employed in dedication

rituals associated with this shrine structure. Two of these, carved in the form of human teeth, may reflect a particular status. Unfortunately, due to the lack of other examples of this symbolism, the specific status represented by these items remains difficult to ascertain.

Finally, it would also seem likely that the greenstone triangulates were status items. This is confirmed by the fact that two of these were found on the chest of the individual in C9-B/1. Others were found in various looter's backdirt and construction fill deposits in Structure C9. Thus, these items were also employed in dedicatory rituals associated with the shrine structure. Although a locus of production cannot be identified at this time, these artefacts have also been found within the Cahal Pech site core (Cheetham, personal communication 1995), and at the site of Pacbitun (Healy, personal communication 1995). A wider distribution in the upper Belize River region is likely, but few projects have discussed the presence of these artefacts in their reports. Notwithstanding this limited understanding, the presence of these artefacts at these three distant loci, and their presence in the C9-B/1 burial, attests to their probable use as social currency.

Cache Data

No late Kanluk phase (650-350 B.C.) caches were found at Zubin. However, the intentional placement of two jadeite beads (carved in the form of human teeth) within the fill deposit of Structure C9-6th is suggestive of cache-like behaviour. Similarly, the inclusion of a figurine head and body fragment (from different figurines) within the fill, in close proximity each other, might also be interpreted as a "cache". However, these "cache" events, if they constitute such, cannot be considered elaborate. With reference to the two jadeite beads, the dearth of associated artefacts and fill context does not attest to an elaborate ritual. Additionally, although these two items were produced from exotic, high quality material, they do not exhibit exceedingly high quality or intricate worksmanship. It is possible, however, that these artefacts were status items. If so, this would infuse this offertory event with slightly more significance The figurines are not crafted from a high quality or exotic raw material. However, the head fragment does exhibit high quality workmanship, and can be considered intricate. Rather than representing status items, these artefacts may be related to lineage or corporate group rituals associated with ancestor veneration (Awe 1992 284, Grove and Gillespie 1984).

Artefact Data: Domestic Architecture

No late Kanluk phase (650-350 B.C.) domestic architecture was found at Zubin This lack of domestic occupation is reaffirmed by the absence of mano and metate fragments from this time period, and the paucity of obsidian blades (the presence of the latter does not necessarily indicate domestic activity, as they are also employed in ritual settings). The appearance of the latter artefacts does reaffirm Awe and Healy's (1994) observation that obsidian blade technology makes its first appearance in the upper Belize River region during the late Kanluk phase (650-350 B C.).

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

No epigraphic data was encountered at Zubin which could be attributed to the late Kanluk phase (650-350 B.C.). The greenstone triangulates, found in construction fill within the C9 shrine structure, and in association with Burial C9-B/1, are probably iconographic elements. This is confirmed by the presence of morphologically similar artefacts at both Cahal Pech (Cheetham, personal communication 1995), and Pacbitun (Healy, personal communication 1995). Unfortunately, more analysis is required to determine the symbolism of this artefact type. The figurine fragments, recovered from both within the C9 ancestor shrine and the *Ac* raised platform, are also likely iconographic items associated with ancestor veneration (Awe 1992:284; Grove and Gillespie 1984). Their presence in these two contexts attests to the "sacredness" of this space. Finally, the two jadeite beads, carved like human teeth, might have also had some iconographic meaning. However, as with the greenstone triangulates, the symbolism behind these artefacts remains difficult to ascertain.

As a whole, the jadeite bead assemblage recovered from both burial (C9-B/1) and fill contexts with the Structure C9 shrine, can be considered wealth items. Given their exotic raw material and limited distribution, the conch shell beads in both Burial C9-B/1, and in the associated fill contexts, may also be viewed as wealth items The apparent conch shell bead workshop at Cas Pek also provides good evidence for at least part-time, if not full-time craft specialisation at Cas Pek (Lee and Awe 1995; Sunahara and Awe 1994, see Figure 3.3). This workshop provides solid evidence for the growing strength of the Cahal Pech residential corporate group, and its attempts at faction building

Settlement Data

No late Kanluk phase (650-350 B.C.) peripheral settlement was encountered in association with the Structure C9 shrine. However, the expansion of the associated public space to the north (into the areas which were to become the *Ac* and *Bac-ha* courtyards), and the eventual erection of the adjacent *Ac* raised platform, produced a larger and more complex "ceremonial" precinct than had been present in the previous early Kanluk phase (900-650 B.C.).

Architecture Data: Residential

No late Kanluk phase (650-350 A.D.) residential architecture was found in association with the Structure C9 shrine.

Architecture Data: Non-Residential

The three manifestations of the late Kanluk phase (650-350 B.C.) shrine structure, C9-7th, C9-6th, and C9-5th, exhibit a *gradual* increase in energy expenditure over time. As has been stated earlier (see above), due to the lack of evidence for any associated residential occupation at the site, it is likely that this shrine structure was reconstructed and maintained by the Cahal Pech residential corporate group as part of its faction building endeavour. It can be seen as a continued effort to control sacred space, and undoubtedly socio-economic and socio-political space, through the control of this prominent locus.

No evidence was found to indicate that the various manifestations of the C9 shrine structure were surmounted by a superstructure of any type. Dirt fill continued to be employed throughout this time period, but the use of dark, organic rich sediments gave way to lighter, coarser fill over time. Some dry-stone core fill was also employed. The use of roughly hewn limestone blocks, most likely of local origin, continued to be used to construct stair risers and retaining walls The use of plaster did, however, begin at this time. Although the *sascab* required for plaster production may have been mined locally, the increase in the use of this material does provide a good indicator of heightened energy expenditure in the construction of the shrine structure at Zubin. In

summary, indications are that a limited, yet consistent increase in construction quality occurred over time.

This increase in construction quality is also pointed to by the movement from the relatively simplistic apsidal forms of the early Kanluk (900-650 B.C.) C9-8th, and late Kanluk (650-350 B.C.) C9-7th, to the more complex pyramidal morphologies exhibited by Structures C9-6th and C9-5th. A related trend concerns the construction of more sacred space adjacent to the C9 shrine In association with the construction of the C9-7th apsidal structure the associated sustaining surface appears to have been extended into what was later to become the *Ac* and *Bac-Ha* courtyards. Subsequently, in conjunction with the construction of the C9-6th and C9-5th pyramidal structures, the *Ac* raised platform was erected. The construction of these ancillary features, particularly the considerable increase in the height of the *Ac* raised platform, bear witness to the expanded strength of the Cahal Pech residential corporate group, and by association its faction. These ancillary features would have complemented the sacred space defined by the C9 ancestor shrine by providing well-defined loci for public rituals in the immediate vicinity of the shrine. In combination, these features would have provided an impressive setting from which the Cahal Pech residential corporate group could have enhanced its factional interests.

Labour Data

The apparent lack of a residential population at Zubin during this time again suggests that it is the Cahal Pech residential corporate group that was in control of the activities at the site. Taking this into consideration, along with the fairly extensive construction effort which was undertaken at the site at this time, it is plausible that community contractual and/or festive custodial labour was employed by the Cahal Pech residential corporate group to achieve their ends at Zubin. It is telling that this labour was available solely for the purpose of producing non-residential architecture, non-basic resources, and by inference, associated rituals. This once again attests to the notion that the Cahal Pech residential corporate group was attempting to solidify its dominant position within the microregion, and increase its power through the formation of factional allegiances.

Summary: Microregional Social Organisation in the Late Facet Kanluk Phase

The Cahal Pech data, as presented by Awe (1992.352-355), provides a number of insights into late Kanluk phase (650-350 B C.) social organisation. He notes that social ranking increased dramatically during this time This is attested in a number of ways, not the least of which is the increase in the numbers and varieties of status markers which were employed at this time (e g. jadeite beads, conch beads, greenstone triangulates). The construction of larger shrines, exhibiting better quality construction, also attests to the increasing strength of the Cahal Pech residential corporate group. The finding of figurine fragments within the fill of such structures may once again imply that ancestor veneration continued to be employed to define sacred space, and in turn tenaciously re-emphasise control over the Cahal Pech locus. The concomitant construction of more numerous residential structures suggests an increase in residential corporate group size at this time. A similar increase in the size of the peripheral population must have added to the residential corporate group's power base. This strength is most clearly seen in an intensification of long-distance exchange.

The growing power of the Cahal Pech residential corporate group is signified best by its heightened faction building program. The apparent control over part-time (or possibly full-time) craft specialists (i.e., Cas Pek), who were involved in the production of social currency (e.g. conch shell beads), attests to the increased emphasis placed on appropriate faction building endeavours. The expansion of long-distance trade, which once again was aimed at procuring items of social currency (e.g. jadeite beads, obsidian blades), also bespeaks of the stress that was being placed on faction building.

Evidence for the exacerbation of ranked status differences, increase in corporate group strength, and expansion of faction building activities is manifest at Zubin. The C9-B/1 burial, exhibiting as it does a preferred loci of interment (i.e., shrine structure), and comparatively rich grave goods assemblage (e g jadeite bead, conch beads, greenstone triangulates), likely testifies to increased status differences. To reiterate, it is likely that Burial C9-B/1 contained a relatively high status individual, one who was a major player in the Cahal Pech faction, and possibly an important member of the more exclusive Cahal Pech residential corporate group. That the individual was intricately involved in the faction building rituals which were conducted at Zubin is suggested by the locus of interment. The interment itself may once again have been associated with ancestor veneration. That the Zubin shrine was related to ancestor veneration rituals is

also suggested by the presence of figurine fragments. In placing this important individual within the shrine the Cahal Pech residential corporate group may have been "creating" an ancestral connection. This ideological exercise would have undoubtedly helped to reaffirm its control over the sacred space that was Zubin

The increase in energy expenditure witnessed by the Zubin architecture, in both the quality and quantity of structural elaborations that were undertaken at this time, also verifies that a great deal of emphasis was being placed on faction building transactions That greater importance was ascribed to the Zubin locus at this time is implied by the aforementioned architectural elaborations, and the refurbishment of the public space adjacent to the Structure C9 shrine. Apparently, Zubin was being modified to more effectively represent the power of the Cahal Pech residential corporate group. The additions would have also created more impressive public space, both in terms of overall quality and proportion. Thus, at least some of the transformations undertaken at Zubin may have been implemented to accommodate a burgeoning peripheral population during rituals. In combination, Zubin would have become a more efficient locus from which rituals could be conducted in order to consolidate factional allegiances. These social transactions would have allowed the expanding residential corporate group to foster control over localised land resources and populations.

In sum, during the late Kanluk phase (650-350 B.C.) there is good evidence for the presence of ranked statuses, corporate groups, and factions. It is also possible that the formation of social strata began at this time. This is implied by the apparent increased status differences, heightened control over trade and craft specialist items, and expanded power over land resources and peripheral populations. These factors suggest that significant differences now existed between members of the Cahal Pech residential corporate group, and other members of its factional alliance. For this reason distinct upper and lower strata may have begun to develop within the microregion at this time.

EARLY FACET XAKAL PHASE (350 B C.-100 A D) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

No Zubin burials were recovered from deposits dating to the early Xakal phase (350 B.C.-100 A.D.). Thus, little can said concerning the osteological, paleopathological, or demographic characteristics of the population. Dietary evidence,

as expressed in faunal remains, is similarly limited by problems of preservation, and the preliminary nature of the analysis The analysis to date does show, however, that freshwater shellfish continued to be employed as a dietary item (Stanchly 1993, 1994, 1995a). Nevertheless, as I have suggested earlier, it is plausible that these shellfish were employed as feasting foods, as well as dietary supplements (Healy et al 1990). This is implied by the rest of the Zubin data, which suggests that during the early Xakal phase (350 B.C.-100 A D) the site was a ritual locus, with no residential occupation.

Mortuary Data

No burials were encountered in early Xakal phase (350 B.C.-100 A.D.) deposits.

Artefacts: Status Markers

A limited number of potential early Xakal phase (350 B.C.-100 A.D.) status markers were recovered from Zubin. Until more detailed microregional comparisons are undertaken it will remain difficult to ascertain whether these constitute elite (indicative of the highest of statuses) or sumptuary items (indicative of lesser status). Possible status markers include one conch shell bead, recovered from the fill in the Structure C9 shrine, and two shell beads (likely marine shell), retrieved from the courtyard fill between the C9 shrine and the *Ac* raised courtyard. Although the raw materials employed to manufacture these items are both high quality and exotic in origin, none can be considered high quality or intricate items with regard to production techniques. The limited number of status items, and the restricted variety of artefact types and materials, suggests that status items were becoming less prevalent at Zubin, at least in comparison to the preceding late Kanluk phase (650-350 B.C.).

Cache Data

One cache was recovered from the early Xakal phase (350 B C -100 A D) Cache A1-F/2, a termination cache discovered within the fill of the *Ac* raised courtyard, consisted of a cluster of broken pottery. The majority of the sherds (14) belonged to a single Sampopero Red/Sierra Red transitional vessel. Other sherds included singular representatives of the Middle Formative, Kanluk phase (900-350 B.C.) Savana and

Jocote Ceramic Groups, and Late Formative, Xakal phase (350 B.C.-350 A D) Flor, Sierra, and Sapote Ceramic Groups.

Artefact Data: Domestic Architecture

No residential, or "domestic" architecture appears to have existed at Zubin during the early Xakal phase (350 B.C.-100 A D.). The absence of manos and metates reaffirms the notion that the site saw little or no occupation at this time. The presence of obsidian blades did increase, but not substantially (N=8). Even so, the presence of obsidian blades does not necessarily indicate domestic activity, as they are also employed in ritual settings.

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

Only one potential iconographic element was recovered from deposits dating to the early Xakal phase (350 B.C.-100 A.D.). This item, a figurine fragment, possibly represents ancestor veneration rituals (Awe 1992:284; Grove and Gillespie 1984). Its discovery within the fill of the courtyard between the Structure C9 ancestor shrine and the *Ac* courtyard hints at the sacred nature of this combination of features. One greenstone triangulate, recovered from fill in the Structure C9 shrine, may also be considered an iconographic element. This interpretation is suggested by the relatively widespread distribution of this particular artefact type within the upper Belize River region (e g. Zubin, Cahal Pech, Pacbitun). The three shell beads from Zubin, previously discussed as potential status items, might also be considered wealth items. No epigraphic items were recovered from the site, nor where there any indications of on-site craft specialisation.

Settlement Data

No peripheral settlement appears to have existed at the Zubin locus during this phase. Although renovations to the ceremonial precinct were undertaken at this time, it does not appear to have witnessed an expansion in overall size. A gradual increase in complexity is suggested, however, by the addition of the A1 shrine structure.

Architecture Data: Residential

No residential architecture appears to have existed at the Zubin locus during the early Xakal phase (350 B C.-100 A D.).

Architecture Data: Non-Residential

A number of additions and renovations were undertaken within the Zubin ceremonial precinct during the early Xakal phase (350 B.C.-100 A D) The C9 shrine structure, and its associated platform, were rebuilt at least three times during this phase (C9-4th, C9-3rd, C9-2nd). The last construction effort (C9-2nd), consisting of minor modifications to the preceding pyramidal structure (C9-3rd), marks the decline of Structure C9 as the primary ritual focus for the site. At this point in time the *Ac* platform was raised, and a second shrine structure, A1-4th, was constructed on its eastern border. This part of the site begins to receive comparatively more construction energy from this phase on. However, evidence suggests that this shift in emphasis was relatively tentative at this point. This is implied by the poor preservation of the surface of the *Ac* raised platform, a fact which may point towards long-term use of this architectural feature.

Although no evidence for superstructures was discovered in association with either of the shrine structures, a gradual increase in the quality of architecture was again recognised. This is witnessed primarily by the expanded use of plastered surfaces and mortar fill. In contrast, roughly hewn cut-stones continued to be employed in stair risers and retaining walls. Indications are that all construction materials could have been procured and manufactured locally. In the absence of evidence for occupation at Zubin, the Cahal Pech residential corporate group must once again be considered the likely social entity behind the construction activities at Zubin. This continued labour investment, and resulting ceremonial activity, would have reaffirmed symbolic, socio-economic, and socio-political control over the prominent Zubin locus.

The complexity of the early Xakal phase (350 B.C.-100 A.D.) non-residential plan, increased number of non-residential structures, and heightened auxiliary features (i e., the *Ac* raised platform), also suggests that the Cahal Pech residential corporate group was increasing in strength. The Zubin data implies that much of this strength was channelled into expanded faction building activities. The construction of the new A1-4th pyramidal structure is particularly interesting. This small pyramidal structure is probably

a precursor to the eastern shrines so prevalent in the Classic period (Becker 1971; McAnany 1995:53; Welsh 1988.190) This implies that, while maintaining the original shrine structure (Structure C9) as a continuous locus for social interaction, the Cahal Pech residential corporate group also felt it advantageous to adopt the new architectural feature as part of its symbolic arsenal. Whereas the original shrine provided a consistent link to the past, the new shrine represented the group's ability to adapt and exploit new, and equally powerful forms of symbolic architecture. It is likely, therefore, that both old and new shrine structures were employed in combination, in a dynamic fashion, in Cahal Pech's faction building transactions.

Labour Data

Once again, the absence of evidence for residential occupation at the site indicates that the Cahal Pech residential corporate group co-ordinated the labour effort at Zubin. Given this situation, and the amount of construction that was undertaken during this phase, it is probable that community contractual and/or festive custodial labour was employed by the Cahal Pech residential corporate group to produce the non-residential construction and elaboration at Zubin. Similar labour relations were likely involved in the carrying out of rituals, and creation of the non-basic resources generally associated with such activity.

Summary: Microregional Social Organisation in the Early Facet Xakal Phase

Early Xakal phase (350 B.C.-100 A.D) social organisation appears to be quite similar to that already described for the late Kanluk phase (650-350 B.C.). It is likely, however, that the social gulf between the Cahal Pech residential corporate group and its peripheral populations increased at this time Awe (1992:356) points out that, "during the Late Formative Cahal Pech becomes one of the pre-eminent sites in the upper Belize Valley." This is indicated by an apparent increase in the number of residential corporate group members (as expressed by a greater number of residential structures within the site core), the construction of high quality monumental architecture within both the Cahal Pech site core and periphery, and improved ability to procure exotic trade items (Awe 1992:356-358). This data implies that there was an increase in ranked status differences at this time; something which is confirmed by the overall burial assemblage (Awe

1992:357). The Cahal Pech residential corporate group also appears to have increased in strength, as suggested by its ability to support more members, its capability to procure a myriad of exotic trade items, and the continued control over the Cas Pek shell artefact production locus (Lee and Awe 1995; Sunahara and Awe 1994; see Figure 3.3). Similarly, the strength of the factional alliance also appears to be substantially superior at this time, as implied by the larger peripheral population that now forms the alliance, and the greater amount of labour that was available for construction of monumental architecture.

The Zubin data confirm these trends. The large-scale, high quality construction that was undertaken at the site again testifies to the strength of the Cahal Pech residential corporate group, and reaffirms the emphasis that it continued to place on those social transactions associated with faction building. The addition of the new shrine, Structure A1, produced a more complex, multifaceted ritual complex from which factional interests could be both initiated and reaffirmed. The ability to maintain such a complex attests to the overall stability of the factional alliance at this time. In sum, early Xakal phase (350 B.C.- 100 A.D.) social organisation consisted of a complex interplay of ranked statuses, corporate groups, factions, and strata. The most significant changes appear to be the strengthening of both the residential corporate group and the factional alliance, and the increasing differentiation between the various ranked statuses, and upper and lower strata. Of these, the most consequential social transformation may be the compounded distinctions between members of the upper stratum (Cahal Pech residential corporate group), and lower stratum (the rest of the factional alliance).

LATE FACET XAKAL PHASE (100-350 B.C.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

Two burials, A1-B/9 and A1-B/10, were interred during the late Xakal phase (100-350 B C.). The individual (gender was indeterminate) in Burial A1-B/9 was 27-40 years of age. Pathologies included "slight arthritic lipping on vertebral fragments" (Glassman and Stockton 1995 8), and the intentional deformation of six teeth (inlaying, Schwake 1995; Stockton and Glassman 1995). The child (4-5 years) in Burial A1-B/10 could not be assigned a sex, and exhibited no pathologies (Glassman and Stockton 1995:8-9). Dietary evidence is limited, due in large part to the poor preservation of

faunal and floral remains. Preliminary analysis has shown that freshwater shellfish were employed as dietary items (Stanchly 1993, 1994, 1995a, see also Healy et al. 1990), and possibly feasting foods. The latter notion reflects the idea that at this time Zubin was predominantly a ritual/administrative locus (see below).

Mortuary Data

Evidence for moderate energy expenditure in mortuary rituals can be inferred by the associated constructional activity that coincided with placement of at least one of the burials dating to this phase. Both the A1-B/9 and A1-B/10 graves had been cut into earlier architecture. Additionally, Burial A1-B/9 was associated with the construction of an entirely new shrine structure (A1-3rd). In fact, it is likely that the death of this individual prompted the termination of the earlier pyramidal structure and the construction of a new one. Burial A1-B/10 may also be associated with this activity, as a secondary burial. It is equally plausible, however, that this individual was interred slightly later. If the latter is true, than little energy must have been expended on the associated mortuary ritual. Being simple crypts (Welsh 1988), both graves exhibit moderate degrees of grave elaboration.

With reference to body position, both individuals were in supine, extended positions, with heads to the south. This Protoclassic/Classic shift in head position, from north (e.g. C9-B/1) to south, is also recognised within contemporary burials at Barton Ramie (Welsh 1988, Table III). This suggests a certain amount of regional coherence in burial practices. However, the supine position of the Zubin burials contrasts with the Barton Ramie data, where prone burials are prevalent (Welsh 1988, Table III). Taking into consideration intrasite trends, wherein the supine body position is associated with more elaborate burials (see below and Chapter 5), it is highly likely that both A1-B/9 and A1-B/10 exhibit higher status body positions.

Comparatively, Burial A1-B/9 contained fairly large quantities of grave goods, including three whole vessels, three bone tubes, a jadeite bead, a medial section of obsidian blade, four conch rectangulates, one worked conch shell section, one complete freshwater bivalve (drilled), and one freshwater clam (right valve). Considered individually, none of these items suggests high status. However, taken as a whole, the variation in grave good types does imply high status. With reference to workmanship, only the ceramic vessels can be considered indicative of high quality workmanship. The

jadeite bead may be considered an intricately made item, and along with the conch shell rectangulates, is classifiable as a high quality raw material. The obsidian, jadeite, and conch materials are all exotic, but with the exception of the conch shell artefacts, which were likely manufactured at the Cas Pek group (Lee and Awe 1995; Sunahara and Awe 1994), it is difficult to ascertain with any certainty whether any of these artefacts were produced outside of the microregion. Aside from the obsidian blade, which may have both utilitarian and ritual functions, all of the objects likely have symbolic/ritual significance.

In contrast, the Burial A1-B/10 grave goods were limited to four olive shell tinklers. Although manufactured from an exotic, high quality raw material, they cannot be considered to exhibit high quality or overly intricate workmanship. It is also difficult to ascertain whether they were produced locally, or brought into the microregion from outside. Although these items are likely not utilitarian, they probably functioned as decorations on clothing, rather than as highly symbolic or ritual items. They may, however, connote some status (see below).

The individual interred in A1-B/9 appears to have held a significant position within the Cahal Pech faction. This is attested by the mortuary data. Given the iconographic interpretation of the burial assemblage, it has been suggested that this individual was a shaman (see discussion in Chapter 5; Iannone 1995c). Considering that the grave was cut into the platform of the A1-4th pyramidal structure, and the interment coincided with the termination of use of this structure, it is possible that the individual in Burial A1-B/9 was closely linked with the ritual activities that were undertaken in association with this building. It is therefore likely that upon interment this individual was transformed into an ancestor who was thereafter seen to reside within the various manifestations of the A1 shrine structure that were to follow

The 4-5 year old child interred in Burial A1-B/10 also appears to have had some ascribed status, given the presence of grave goods, the moderately elaborate grave form, and the grave location (i.e., associated with the shrine). None of the evidence suggested that this was a sacrifice, but this cannot be ruled out. Although this child was probably not a religious practitioner, indications are that he/she was an important member of the Cahal Pech faction. The most logical conclusion is that this was the child of an important corporate group and/or faction member. Through the non-dedicatory interment ritual this child might also have been transformed into an ancestor, one which was deemed fitting to link to the A1 shrine

Artefacts: Status Markers

Outside of the two late Xakal phase (100-350 A.D.) burials, no other potential status related artefacts were recovered from deposits dating to this time. As previously discussed, the olive shell tinklers interred with Burial A1-B/10 might be considered status items, considering the exotic origin and high quality of the raw material This observation is lent credence by the fact that they were associated with a fairly young child (4-5) who could not have acquired them through his/her daily deeds. Upon initial consideration, the moderate quality and degree of intricacy in workmanship does not suggest that the olive shell tinklers were "elite" items. However, the fact that they are regularly found as components of the "royal belts" worn by *ahauob* (kings and important nobility; see Schele and Miller 1986.70-71, Figure 1.4d, 1.4e), implies that they could signify elite status (the highest of statuses). In contrast, the extensive vertical distribution of these items also attests to their use by non-elite members of society. Thus, in the Zubin case, they probably represent lesser status, sumptuary items. Whether these artefacts were produced locally, or were obtained through long distance exchange cannot be determined. In sum, it is plausible that this child was a significant member of the Cahal Pech faction.

Taken singularly, none of the grave goods in Burial A1-B/9 implies high status on its own. Similarly, with the exception of the ceramic vessels, none of the artefacts display overwhelming degrees of quality or intricacy in workmanship. However, this assemblage is made up of a wide variety of artefacts, and a number of the items are manufactured from exotic, high quality raw materials. They can therefore be taken to imply that the individual in Burial A-B/9 had "high" status. This assessment is lent credence by the presence of six inlayed teeth. Taking into consideration the large number of inlays, variety of inlay types (e.g. hematite, jadeite), high quality workmanship, high quality raw materials, intricate production methods, and exotic origin of the raw materials, these artefacts confirm a high status position for this individual. Taken as a whole, this individual must have been an important member of the Cahal Pech faction, and was potentially closely linked with the Cahal Pech residential corporate group.

Cache Data

No caches were encountered which dated to the late Xakal phase (100-350 A.D.).

Artefact Data: Domestic Architecture

No residential architecture appears to have existed at Zubin during the late Xakal phase (100-350 A.D.). Similarly, artefacts usually associated with domestic occupation were relatively rare. No manos were recovered, and only one metate fragment was retrieved. The only obsidian blade fragment encountered, a medial section, derives from a ritual context (Burial A1-B/9).

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

No epigraphic data was recovered from late Xakal phase (100-350 A.D.) deposits. Iconographic data is present, but limited to the Jaguar God of the Underworld vessel, and possibly the associated "snake" vessel, both from Burial A1-B/9. A limited number of wealth items were also recovered from burial contexts. The marine shell artefacts from Burials A1-B/9 and A1-B/10 indicate a certain amount of wealth. Similarly, the inlayed teeth from the individual in Burial A1-B/9 might also indicate a certain amount of wealth. These teeth also imply that this individual had access to a craft specialist.

Settlement Data

No peripheral settlement appears to have existed at the Zubin locus during this phase Renovations within the site core did continue, however, and the overall complexity of the ritual precinct increased during this phase.

Architecture Data: Residential

No residential architecture appears to have existed at the site during the late Xakal phase (100-350 A.D.).

Architecture Data: Non-Residential

The non-residential architecture at Zubin continued to be modified during the late Xakal phase (100-350 A.D). The process which began in the preceding early Xakal phase (350 B.C.-100 A.D.), namely the shift in focus from the Structure C9 shrine to the Structure A1 shrine and associated raised platform, was completed during the late Xakal phase (100-350 A.D.). This shift may foreshadow the importance that eastern shrine structures were to take on in the Classic period (350-875 A.D.). A result of this trend is that Structure C9 received only minor modifications during this time (C9-1st). This activity proved to be the last construction effort focusing on this building. In contrast, the *Ac* courtyard saw considerable construction effort. The courtyard itself was elevated substantially, and extended to the south. This enlarged sustaining surface supported a new A1 shrine structure (A1-3rd). In conjunction with these modifications, the first construction at the A3 locus was undertaken (A3-5th). This pyramidal structure exhibited a morphology suggestive of an administrative function. Thus, Zubin appears to have taken on increased importance during the late Xakal phase (350-100 A.D.), serving as both a ritual and administrative focus within the Cahal Pech microregion.

It is again likely that all of the raw materials employed in these construction efforts were obtained locally. The quality of architecture was generally good, plaster being effectively employed along with mortar fill. A trend towards the use of well-dressed, as opposed to roughly hewn, cut-stones culminated at this time. Neither of the platforms exhibited evidence for a superstructure. It is likely that the A1-3rd shrine had an open platform, or at the most a pole-and-thatch superstructure. In contrast, evidence from the later manifestations of the A3 administrative building suggest that A3-5th may have supported a long, narrow room of pole-and-thatch construction.

In broad terms, the variability of the new site plan, and the association of ritual and administrative buildings, made for a much more complex social setting than had previously existed. This complexity suggests that the Zubin locus was assigned more importance at this time, a conclusion which is supported by the amount of energy invested in the expansion of the sustaining surface. The latter would have provided more public space for the observance of rituals and ceremonies, as well as the witnessing of administrative proclamations. Given the absence of evidence for domestic occupation, and the extent of the architectural changes, it is likely that the Zubin locus was modified by the Cahal Pech residential corporate group in order to consolidate its factional

associations. Specifically, the construction of an administrative building may indicate that, while the Cahal Pech residential corporate group was still cultivating its factional allegiances through ritual activities, it was also consolidating its factional alliance through administration.

Labour Data

The absence of evidence for a residential population again suggests that Cahal Pech was directly involved in supplying labour for the rituals and construction efforts at Zubin. Considered in conjunction with the extent of the overall construction effort, both the nature of the ritual activity (i.e., burials), and the architectural construction and elaboration (ritual/administrative), suggest that the Cahal Pech residential corporate group employed community contractual and/or festive custodial labour for both ritual (i.e., shrine construction, burials), and administrative exercises. Similar labour relations were likely involved in the production of the non-basic resources associated with such activities.

Summary: Microregional Social Organisation in the Late Facet Xakal Phase

The data presented by Awe (1992:356-360) for this period implies that the Cahal Pech residential corporate group continued to grow in power, and that there was a concomitant increase in the strength of its factional alliance. The efficacy of the Cahal Pech residential corporate group is signified by its capacity to support more corporate group members, its capability to obtain more varied, and greater quantities of exotic trade items, and its continued command over the Cas Pek shell artefact manufacturing site (Lee and Awe 1995; Sunahara and Awe 1994; see Figure 3.3). Similarly, the presence of an early stela monument, discovered at the Zopilote ceremonial group (a causeway termini configuration located ca 750 m south of the Cahal Pech site core [Cheetham 1994; see Figure 3.3]), attests to the Cahal Pech residential corporate group's continued participation in a broader pan-Maya interaction sphere, and its expanded control over important ideological elements. Correspondingly, the factional alliance also appears to have had more vigour at this time, as suggested by the greater body of labour that could evidently be harnessed for the erection of monumental architecture, and the larger peripheral population that now contributed to its power base. In addition to the

aforementioned trends, it is also likely that ranked status differences increased at this point in time, and the gulf between the upper and lowers strata appears to have widened even further.

These trends are confirmed by the Zubin data. An increase in ranked status differences is attested by the varied number of grave goods, inlayed teeth, and more elaborate grave form associated with the individual in Burial A1-B/9. Concomitantly, the child burial, A1-B/10, which contained exotic grave goods, and exhibited a preferential burial locus (i.e., the Structure A1 eastern ancestor shrine), suggests that ascribed status differences were expanding at this time. The strength of the Cahal Pech residential corporate group, and by association its factional alliance, is attested by the series of high quality architectural modifications that were carried out at Zubin These refurbishments emphasised the contemporary *Ac* courtyard, and the Structure A1 eastern ancestor shrine. This implies that this more neoteric form of ritual architecture (eastern ancestor shrine) had become a much more effective faction building tool than the antiquated Structure C9 shrine. The inclusion of the two burials within the Structure A1 ancestor shrine may have been undertaken in order to create further "ancestors", and in doing so enhance the connection between the Cahal Pech residential corporate group and the prominent Zubin locus. In combination, the Zubin data reaffirm that the gulf between the upper (Cahal Pech residential corporate group) and lower social strata (the rest of the factional alliance) continued to increase at this time.

The collateral construction of the Structure A3 administrative building transformed Zubin into a ritual *and* administrative locus. This act might reflect a partial shift in emphasis by the Cahal Pech corporate group, towards the consolidation of the factional alliance through administrative tactics, as opposed to a continued reliance on the forms of ideological conversion that had been practised previously On one hand, this may attest to the relative stability of the factional alliance at this time. In contrast, it may also suggest the beginning of some intrafactional tensions which needed to be addressed through the infusion of stricter administrative practices, and more blatant, ritual displays of power (e g the burials placed within the Structure A1 ancestor shrine). In order to ascertain which of these diametrically opposed hypotheses most accurately reflects the state of the factional alliance at this time, the subsequent period must be examined for obvious signs of factional weakness or strength (see below).

In sum, ranked statuses, corporate groups, factions, and strata existed during the late Xakal phase (100-350 A.D.). The major changes continued to be the increased

differentiation between both ranked statuses and social strata, and the greater strength of the Cahal Pech residential corporate group and its factional alliance. However, as alluded to above, the end of this period may have been characterised by a more blatant reliance on administrative coercion, implying that both the Cahal Pech corporate group and its factional alliance had reached an apex with reference to their strength. This is suggested by the data from the following Ahcabnal phase (350-600 A.D).

AHCABNAL PHASE (350-600 A.D.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

One burial was encountered within Ahcabnal phase (350-600 A.D.) deposits. Unfortunately, this burial (A1-B/13) was discovered near the end of the 1993 excavation season, and could not be excavated. Thus, no osteological, paleopathological, or demographic data is available for this phase. Preliminary faunal analysis again shows that freshwater shellfish supplemented the diet at this time (Stanchly 1993, 1994, 1995; see als Healy et al. 1990). However, as has previously been stressed, a consideration of the nature of the Zubin locus (i.e., ritual/administrative site) suggests that these foods may have also been employed in feasting.

Mortuary Data

As mentioned above, one burial, A1-B/13, was encountered within Ahcabnal phase (350-600 A.D.) deposits associated with the A1 shrine structure. Unfortunately, time limitations only allowed for a cursory investigation of this interment to be conducted. That a moderate amount of energy was invested in the burial ritual is suggested by the large cut that was made through the two earlier architectural levels in order to situate the grave. The grave form itself, being a simple crypt (see Welsh 1988), also exhibited a moderate amount of energy expenditure. The body position, extended prone, is likely low status. This is implied by the fact that all of the elaborate burials at Zubin exhibited supine body positions (see Chapter 5). It is reaffirmed by the fact that the cursory examination failed to locate any grave goods in association with this burial. However, the location of this grave, in association with the A1 shrine structure, suggests that it was of some importance.

The timing of the burial indicates that this interment was not dedicatory (i e , there is no associated construction). As alluded to previously, the energy expended in the construction of the grave chamber itself was fairly extensive, but this does not rule out the notion that the individual was buried as a sacrifice during some non-dedicatory ritual. It is equally plausible, however, that this was a lesser status individual who was somehow associated with the ritual and/or administrative activities at Zubin. This social position may have warranted interment within close proximity to the shrine, but ruled out the inclusion of grave goods, or the use of a higher status body position.

Artefacts: Status Markers

No status related artefacts were recovered from Ahcabnal phase (350-600 A.D.) deposits.

Cache Data

No Ahacabnal phase (350-600 A.D.) caches were encountered.

Artefact Data: Domestic Architecture

No domestic architecture appears to have existed at the site during the Ahcabnal phase (350-600 A.D.). The complete absence of domestic artefacts, such as manos, metates, and obsidian blades, confirms that the site did not accommodate a residential population at this time.

Iconographic, Epigraphic, Wealth, and Craft Specialist Data

No Ahcabnal phase (350-600 A D.) iconographic, epigraphic, wealth, or craft specialist data was discovered at Zubin

Settlement Data

No peripheral settlement appears to have existed at Zubin during the Ahcabnal phase (350-600 A.D.) The limited renovations conducted within the

ritual/administrative core of the site were not sufficient to enhance the overall complexity of the site plan.

Architecture Data: Residential

No residential architecture appears to have existed at Zubin during the Ahcabnal phase (350-600 A.D.).

Architecture Data: Non-Residential

Only minor modifications were undertaken within the ritual/administrative core during the Ahcabnal phase (350-600 A.D.). Structure A3, the administrative structure on the western side of the *Ac* courtyard, saw minor, yet significant modifications during this phase (A3-4th). These modifications included a slight elevation of the pyramidal structure platform, and elaboration of the superstructure. High quality mortar fill continued to be employed in these construction efforts. In addition, low masonry walls, with associated outsets, were added to the superstructure. Indications are that pole-and-thatch or wattle-and-daub continued to be employed for the upper walls and roof. In comparative terms, the addition of the well-dressed masonry walls improved the quality of the building. However, despite the labour investment, the narrowness of this room probably limited its use. In all likelihood, the rationale behind this construction was to enhance the already extant pyramidal structure, for continued use in administrative situations. This structure may therefore be more closely related to consolidation of the extant Cahal Pech factional alliance (through administration), as opposed to being associated with alliance building (i e., ritual/ceremonial activities).

Only limited refurbishment efforts were taken up within the remainder of the *Ac* courtyard. This activity was restricted to three relatively thin refloorings of the *Ac* courtyard surface. With the exception of some minor repair work, no modifications to the existing Structures A1 and C9 architecture were undertaken. This lack of emphasis on ritual architecture again suggests that the Cahal Pech corporate group was more concerned with faction consolidation than faction building.

Labour Data

Considering the limited extent of the events assigned to the Ahcabnal phase (350-600 A.D.), a large labour investment was likely not required However, as continued to be the case, no residential population existed at Zubin to undertake these activities. Thus, the Cahal Pech residential corporate group must have continued to initiate these actions. The nature of the labour investments, being related to ritual (i.e., burial), and administrative goals, suggests that community contractual and/or festive custodial labour was employed. Similar labour relations were also likely involved in the production of the non-basic resources associated with such activities. The restricted nature of this labour involvement may suggest a weakening of the Cahal Pech residential corporate group at this time, and a concomitant weakening of the microregional factional alliance. The emphasis on the A3 administrative structure, as opposed to the ritual shrines, may indicate that the factional alliance had reached a point whereby effective administration was considered a more fruitful means of reinforcing allegiances than religious rituals.

Summary: Microregional Social Organisation in the Ahcabnal Phase

As yet, little has been written concerning the Classic period (350-875 A.D.) at Cahal Pech. It is generally accepted, however, that the Ahcabnal phase (350-600 A.D.) is a period of limited construction activity at the site. Although the failure to isolate Ahcabnal phase (350-600 A.D.) construction levels may partially reflect the continued use of Late Formative ceramics during the Early Classic period (Hammond 1985; Lincoln 1985), Awe and Campbell (1988.40-41) suggest that Cahal Pech did suffer a series of setbacks at this time. They argue that:

> The nature of the Early Classic [350-600 A D] period at Cahal Pech is presently the most difficult to define. During this time the site appears to have lost its previous regional control...This decline in importance is suggested by a paucity of architectural activity and by a drop in the frequency of Tzakol Sphere diagnostics relative to material from the Late Formative Period [Awe and Campbell 1988:40-41]

The cessation of large-scale construction projects has also been noted in the Cahal Pech periphery, both within residential (e g the Zinic Group; Conlon 1992, Conlon and Awe 1991; see Figure 3.3) and ritual (e.g. the Zopilote Group; Cheetham 1994; see Figure 3.3.) contexts. Other evidence also points towards there having been a great deal of turmoil within the faction. The Cas Pek loci (see Figure 3.3.), so important in the manufacturing of conch shell alliance building goods during the Formative period, appears to have halted production at this time (Lee and Awe 1995; Sunahara and Awe 1994). In sum, both the Cahal Pech residential corporate group, and its factional alliance, appear to have weakened substantially during the Ahcabnal phase (350-600 A.D.). This lapse in power may reflect broader macroregional changes within the Maya subarea (see below).

Indications are that this hiatus lasted until near the end of this phase (Awe and Campbell 1988), when a revitalisation movement was implemented by the Cahal Pech residential corporate group. This renewed activity was, however, quite different from that which had preceded it. Awe et al. (1991) note that the first restricted access plaza and courtyard constructions were added to the site core (the site had exhibited a relatively open plan until this point). The erection of some stela monuments may have coincided with this activity. In addition, the first evidence for substantial labour investment in burial contexts dates to this time. Excavations at the Zopilote ceremonial group (Cheetham 1994), a causeway termini ritual loci located ca. 750 m south of the Cahal Pech site core, unearthed a richly furnished "elaborate crypt" (as defined by Welsh 1988). This grave contained a comparatively high status individual, as attested by the variety and types of grave goods (e.g. fine polychromes, stingray spines, shell earflares, a jadeite pendant and bead), and the inclusion of a sacrificial victim in a "subordinate position", near the feet (Cheetham 1994 6-10). Considered in combination, this data indicates that the Cahal Pech residential corporate group had achieved some success in revitalising itself, and its factional alliance It also attests to increasing differentiation between both the various ranked statuses, and social strata that formed the major horizontal divisions within the microregional community.

Zubin reflects the trends discussed above. The paucity of large scale construction efforts again attests to the initial period of weakness exhibited by the Cahal Pech residential corporate group, and in particular its factional alliance. The refurbishing of the administrative structure (A3), which was likely conducted during the early part of this phase, may represent a last gasp effort to consolidate the deteriorating factional

alliance through administrative endeavours. However, the absence of associated ritual activity, with the exception of the interment of the lower status Burial A1-B/13, suggests that Zubin was no longer considered an effective locus from which faction building rituals could be conducted.

As alluded to above, the problems witnessed within the Cahal Pech microregion appear to reflect occurrences within the broader Maya lowlands. Specifically, they likely result from the transformations of the "kingship" institution that occurred at this time. Sharer (1994:128) has postulated that the "traditions of rulership commemoration" in the Maya lowlands reflect a "two-stage" developmental process He suggests that:

> The first stage involved the association of the abstract power of rulership with the cosmos as represented by temples, and probably originated in the core of the lowland area at such sites as El Mirador and Nakbe. It may also have been in this original heartland of lowland rulership that carved scenes, probably cosmological in theme rather than personifications of individual kings (such as are seen in the south), were first carved onto stone stelae. The second stage, probably during the Protoclassic..., saw the emergence of power manifest in individual rulers signalled by adopting the southern practice of combining the image of the king with calendric and other contextual information on carved stelae [Sharer 1994:128].

Freidel and Schele (1988:549) concur, arguing that "what occurred between the Late Preclassic period and the Early Classic period...was not the invention of the Lowland Maya kingship, but rather a transformation of the institution." Specifically, as postulated by Schele and Miller (1986:105), "we can assume that their underlying strategy was to transform the ideology underlying the social structure, so that the existence of a ranked elite would be seen as the natural order of the Maya world" (see also Freidel and Schele 1988; Marcus 1974). Schele and Miller (1986 106) conclude that the Maya were reacting to a "profound social crisis", and that their response to this crisis was not an economic one, but rather an ideological one. This ideological conversion proceeded to transform mere humans into semi-divine, and ultimately divine kings.

Whereas this transformation may have been justified through a series of ideological conversions (as stressed by the authors cited above), it also had very tangible socio-political ramifications (see Sharer 1992:134). Specifically, the separation between

these new deified beings (and royal lineage members) and the rest of society was effected through a number of symbolic acquisitions which were employed to exacerbate the differences between the two extant social strata. The additions to the symbolic arsenal included stelae, altars, written texts, and eccentrics, as well as differential treatment in death (larger, more elaborately furnished graves; control over preferential burial loci). The use of restricted access architectural features provided for further spatial separation between the rulers and the ruled. Considered in combination, these transformations would have acted to create a ruling caste, and a ruled caste, as the previously extant social strata dichotomised into two very different social units based on kinship and ideological differences.

Needless to say, not every group was able to carry out this shift with equal grace. In fact, some of the more established Late Formative centres, such as El Mirador and Cerros, appear to have been unable to make the transition (e.g. Sharer 1992:134, 1994:122). A similar incapacity seems to be reflected in the Cahal Pech data, at least for a short period of time, as represented by the apparent decline in the early Ahcabnal phase (350-600 A.D.). It is only near the end of this phase that the Cahal Pech residential corporate group appears to have been able to revitalise both itself, and its factional alliance, and begin to initiate the ideological transformations that were to become characteristic of the Late Classic period (600-875 A.D.).

In sum, the new features which appeared at Cahal Pech at this time (restricted access plazas, elaborate burials, and possibly stelae [and likely associated texts]) are likely related to the changing way in which rulership was now commemorated in the Maya lowlands. The adoption of this new program of rulership, which stressed individuals and their histories, likely shifted a large part of the socio-political and ideological emphasis away from the network of sacred landmarks (e g. Zubin) that had been so effective in alliance building in the Middle and Late Formative periods (900 B.C.-350 A.D.), towards the immediate sacred space surrounding the ruler (e g Cahal Pech) The importance of individual rulers may have also meant that direct ancestral lines, as represented by the stelae/altar/tomb/temple complexes within sites like Cahal Pech, may have become more important than "communal" ancestors. Some "communal" ancestor shrines, such as those at Zubin, may have fallen into disuse, or at least were ascribed with considerably less importance than those shrines adjacent to the ruler's themselves. Thus, the ideologically based, socio-political transformation which came about at this time may have refocused much of the faction-building efforts within the site

core of Cahal Pech, where the rulers and their direct line of ancestors resided. Although Zubin might have continued to have had some limited ritual functions, its main role may have been as a secondary locus for faction maintenance activities (i e , through its administrative architecture).

In conclusion, it is plausible that social organisation during the early part of the Ahcabnal phase (ca. 350-500 B.C.) continued to be similar to that of the preceding Late Formative period (350 B C.-350 A D). Thus, ranked statuses, corporate groups, factions, and *strata* were likely present. With the revitalisation movement, and the socio-ideological, socio-political, and concomitant material transformations that occurred near the end of the Ahcabnal phase (ca. 500-600 A.D.), the extant social strata likely contracted into a ruling caste, and a lower caste Thus, by the onset of the Late Classic period (ca. 600 A.D.), social organisation within the Cahal Pech microregion was comprised of a complex interaction between ranked statuses, corporate groups, factions, and *castes*.

XNIPEK PHASE (600-675 A.D.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

One burial, A1-B/11, was recovered from Xnipek phase (600-675 A.D.) deposits. This individual, an 18-30 year old male, exhibited no pathologies (Glassman and Stockton 1995). No other osteological, paleopathological, or demographic data is available for this phase. Evidence from faunal analysis does provide some insights into diet. Freshwater shellfish continued to be employed as dietary supplements (Stanchly 1993, 1994, 1995a; see also Healy et al. 1990). To reiterate, it is also plausible that these items were employed as feasting foods. This idea is lent credence by the fact that no residential occupation appears to have existed at Zubin at this time.

A Xnipek phase (600-675 A.D.) midden, located adjacent to the southern retaining wall of the *Ac* courtyard, contained a variety of well preserved faunal materials. These included "white-tailed deer, rabbit, agouti or paca, grouper, and parrotfish remains" (Stanchly 1995a 176). According to Stanchly, other mammal, bird, reptile, rodent, and fish remains were also present. He notes that a good number of these bone fragments were either charred and/or calcined. The midden deposit itself consisted of very fine "ashy" sediments. Stanchly notes that, with the exception of the coastal fish

(grouper, parrotfish), all of these species could have been procured locally. Due to the fact that no residential architecture appears to have existed at Zubin during the Xnipek phase (600-675 A.D.), it is plausible that this midden resulted from a large feast conducted at site. If so, the midden contents provides further insights into the dietary items available for consumption by feast participants (i.e., members of the Cahal Pech residential corporate group and/or high ranking factional affiliates), rather than any residential population occupying the site.

Mortuary Data

One burial, A1-B/11, was found in Xnipek phase (600-675 A D) deposits associated with the A1 shrine structure. A fairly significant expenditure of energy was again associated with the construction of this burial, the grave being cut through two earlier construction levels. The grave itself, a simple crypt (Welsh 1988), was moderately elaborate. The body position, being extended, prone, with the head to the south, is indicative of lower status, at least at Zubin (i.e., prone burials had relatively few grave goods, whereas supine burials were consistently more elaborate). This status determination is reaffirmed by the lack of grave goods within the burial. That the burial was associated with the A1 shrine structure does suggest some importance. The timing of the interment, however, rules out its placement as a dedicatory offering (i.e., there is no associated construction). Although the energy expended in the construction of the grave chamber itself was fairly extensive (i.e., cutting through earlier construction levels; simple crypt chamber), it remains plausible that this was a sacrificial offering of some sort. In contrast, it is also possible that this was an individual of lesser status, one associated in some way with the ritual and/or administrative activities conducted at the site. This association may have warranted interment within close proximity to the shrine, but the individual's status may have determined that he/she be buried in a prone position without grave goods.

Artefacts: Status Markers

A handful of potential status markers were recovered from Xnipek phase (600-675 A.D.) contexts. As no residential occupation is postulated for the site at this time, these artefacts likely signify the status of people who were either involved in the

administrative activities or rituals conducted at the site, or the people who participated in these activities. Although limited in number, the few artefacts that were recovered were manufactured from a variety of raw materials. None exhibit overwhelming workmanship or intricacy, but some are manufactured from high quality, exotic raw materials In considering these factors, none appear to reflect "elite" status (the highest of statuses), but rather are best classified as "sumptuary" items (indicative of high, but not the highest of statuses). One drilled sherd, and a drilled avian long bone, were recovered from fill within the raised platform south of the *Ac* courtyard retaining wall. One modified avian long bone, one conch shell pendant, and one jadeite inlay were recovered from the overlying midden deposit. Although highly speculative, it is possible that the latter items were lost during the feast which is thought to have produced this midden.

Cache Data

One cache, A4-F/5, was encountered during the excavation of Xnipek phase (600-675 A.D.) deposits. This cache, consisting of portions of an unslipped olla, was discovered within the fill of the raised platform adjacent to the *Ac* courtyard southern retaining wall. It simplicity in form and contents indicates that little energy was expended in the placement of this offering. However, the cache is significant in that it coincided with the construction of the new courtyard surface, suggesting that it may represent a combination termination/dedication ritual.

Artefact Data: Domestic Architecture

No residential architecture appears to have existed at the site during the Xnipek phase (600-675 A.D.). This lack of domestic activities is also attested to by the relative paucity of domestic artefacts. No mano fragments were recovered, and only one metate fragment was encountered. In contrast, moderate percentages of obsidian blades were discovered within Xnipek phase (600-675 A D.) deposits. However, it must be stressed that, aside from domestic activities, obsidian blades can also be employed in ritual activities. It is also probable that they would be utilised in activities such as feasting Thus, their presence does not necessarily imply that residential/domestic activities were undertaken at the site.

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

No iconographic or epigraphic artefacts were recovered from Xnipek phase (600-675 A.D.) contexts. The conch shell pendant, and jadeite inlay may be interpreted as wealth items, as well as status markers. However, as stated above, these probably reflect the wealth of the ritual or administrative practitioners whose duties lay at the site, or possibly some of the other individuals who participated in these activities. No evidence exists for craft specialisation at the site. Although it is possible that some of the artefacts were manufactured within the region, under the patronage of the Cahal Pech residential corporate group, the limited data does not provide conclusive evidence for this.

Settlement Data

No evidence exists for peripheral settlement during the Xnipek phase (600-675 A.D.). Although minor modifications to existing architecture were undertaken within the Zubin ritual/administrative core, these did not enhance the overall complexity of the site to any great degree.

Architecture Data: Residential

No residential architecture appears to have existed at Zubin during this phase.

Architecture Data: Non-Residential

The ritual/administrative architecture at Zubin did see some limited refurbishments during the Xnipek phase (600-675 A.D.). The upper terrace of the A3 administrative structure was extended to the east, and the axial stair rebuilt (A3-3rd). High quality mortar fill, and well-dressed cut-stones continued to be employed. These refurbishments of the administrative structure, considered in combination with the apparent absence of ritual construction at this time, imply that the revitalised Cahal Pech residential corporate group was concentrating most of its efforts on faction consolidation and maintenance efforts (e g administration), rather than faction building (e g ritual/ceremonial activity).

In conjunction with the aforementioned Structure A3 refurbishments, the platform adjacent to the southern *Ac* courtyard retaining wall was raised substantially (probably above the level of the associated *Cutz* raised platform). The fill for this consisted of dark, organic-rich sediments. In general, it is likely that local materials were employed in these construction activities. It should be noted that the previously discussed midden deposit formed over the new raised platform surface, adjacent to the *Ac* courtyard southern retaining wall. As hypothesised previously, this deposit may provide evidence of a large feast and/or ceremony of some sort (considering the depth and spatial extent of the ash lens). It is important that this refuse was not cleaned up. This suggests that this point in time represents a significant period of transformation at the site. This observation is lent credence by the dramatic innovations that were to take place in the ensuing early Maxik phase (675-750 A.D.; see below).

Labour Data

Although limited labour would have been required to undertake the few structural modifications that were carried out in the Xnipek phase (600-675 A.D.), the fact that these actions were undertaken at a ritual/administrative site, without an associated residential population, implies that it was the Cahal Pech corporate group who sponsored these activities. This labour, focusing solely on administrative architecture, was probably community contractual and/or festive custodial. Any non-basic resources were likely produced through similar labour relations. The evidence for the proposed feast also implies some control over labour. However, if this feast was undertaken by the principal Cahal Pech residential corporate group, or a similar social grouping, it is likely that familial contractual labour was involved.

In sum, the trend which began in the preceding Ahcabnal phase (350-600 A.D.), namely the dramatic decrease in construction activity at Zubin, continued in the Xnipek phase (600-675 A.D.). In the end, this data attests to the declining importance of Zubin as a microregional ritual/administrative locus during the Classic period (350-875 A.D.). In fact, indications are that Zubin became a much more insular, residential site during the latter part of the Late Classic period (ca. 675-875 A.D.; see below).

Summary: Microregional Social Organisation in the Xnipek Phase

Once again, very little Late Classic period (600-875 A D) data has been published for the site core of Cahal Pech. Fortunately, some insights into social organisation can still be gleaned from the data that is presently available. The trends that began during the *latter* part of the preceding Ahcabnal phase (ca. 500-600 A.D.) persisted during the following Xnipek phase (600-675 A D ; Awe and Campbell 1988:41). The focus of activity continued to be the Cahal Pech site core, where construction and elaboration of restricted access courtyards was carried out (Awe et al. 1991), and as a result, more circumscribed residential and ritual space was produced. In conjunction with this activity elaboration of the more public, administrative/ritual space was also undertaken. Exact dates are difficult to assign to the various stelae at Cahal Pech, because they are uncarved, but some likely date to this time period. In combination, this data implies that the new program of kingship commemoration continued to be implemented with some success at Cahal Pech. This, in turn, suggests that the power of the Cahal Pech residential corporate group, and its factional alliance, had increased at this time. Concomitantly, differences between the various ranked statuses, as well as the ruling and lower castes, were probably heightened.

Zubin appears to have continued to play a minimal role in the revitalising activities conducted by the Cahal Pech residential corporate group. This is implied by the limited extent of the administrative construction that was undertaken at Zubin. The refurbishments that were implemented imply that factional administration was conducted at Zubin, but the circumscribed nature of these renovations suggest that Zubin had failed to regain its former importance as an administrative node That feasts may have been carried out at the site is suggested by the large midden, which contained the remains of exotic food stuffs These regales may have coincided with both administrative and ritual activities. However, the lack of ritual construction does suggest that the site's ritual functions continued to be downplayed The only evidence for ritual activity, the interment of one rather low status individual (Burial A1-B 11) in association with the Structure A1 shrine, does not appear reflective of an awe-inspiring ceremonial display. In the end, the Structure A1 eastern ancestor shrine appears to have failed to regain its power as an integrative mechanism, otherwise more evidence for construction and ritual activities would be forthcoming.

Whereas the latter part of the Ahcabnal phase (ca 500-600 A D) witnessed the successful implementation of the new social order, the Xnipek phase (600-675 A.D) was a time of consolidation on the part of the Cahal Pech residential corporate group. Once again, due to the new ideological and socio-political charter, Zubin would have remained a subsidiary locus for faction related activity. The pivotal position of the individual rulers and their immediate ancestors would have required that their own stelae/altar/tomb/temple complexes be emphasised at the expense of others. For this reason a concerted effort must have been undertaken to concentrate faction building and consolidation activities within these loci (e.g. Cahal Pech), as they represented the primary manifestations of power for these new-style regimes. As a result, the import of older, "communal" ancestor shrines (e.g. Zubin) was likely downplayed significantly.

In conclusion, social organisation during the Xnipek phase (600-675 A.D.) probably remained similar to that previously described for the latter part of the Ahcabnal phase (ca. 500-600 A.D.). Specifically, ranked statuses, corporate groups, factions, and castes were likely present. It is plausible, however, that the differences between both the various ranked statuses, and the ruling and lower castes, increased as the tenets of the new ideological and socio-political program solidified in the minds of the Maya. Undoubtedly, the power of the symbolic tools employed (e.g. elaborate burial rituals, stelae, altars, written texts, eccentrics, restricted access courtyards) would have contributed to the success of this ideological and socio-political conversion.

EARLY FACET MAXIK PHASE (675-750 A.D.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

A number of early Maxik phase (675-875 A.D) burials were recovered during the Zubin excavations In many instances, however, poor preservation of the remains precluded the determination of age, sex, stature, and pathologies (e g. Burials A1-B/2, A1-B/4, A1-B/6, A1-B/7). In others, only partial inferences could be made (see Glassman and Stockton 1995; Schwake 1995) Those burials that did provide such data indicated that most, if not all of the early Maxik phase (675-875 A.D.) interments contained adults (Burials A1-B/1, Burial A1-B/3 - Individual #1, Burial A1-B/3 - Individual #2; Burial A1-B/3 - Individual #3; Burial A1-B/3 - Individual #4, Burial A1-B/3 - Individual #5, Burial A1-B/5, A1-B/8, A1-B/12). Sex could only be

ascertained in a few instances. Both males (Burials A1-B/3 - Individual #1, Burial A1-B/3 - Individual #3, Burial A1-B/3 - Individual #4, Burial A1-B/3 - Individual #5, Burial A1-B/8), and females (Burial A1-B/3 - Individual #2) were represented, although the latter were comparatively rare in the assemblage. Pathologies included intentional tooth filing (Burial A1-B/3 - Individual #1, Burial A1-B/3 - Individual #2, Burial A1-B/3 - Individual #3), inlaying (Burial A1-B/5), and cranial deformation (Burial A1-B/3 - Individual #1, Burial A1-B/3 - Individual #2), as well as some bone fractures (Burial A1-B/8), and degenerative joint disease (Burial A1-B/12).

Some dietary evidence has also been gleaned from the analysis of faunal remains. Specifically, freshwater shell fish continued to be utilised (Stanchly 1993, 1994, 1995a). However, as has been stated throughout, as well as having been dietary supplements (Healy et al. 1990), there remains a good possibility that these food stuffs were employed in social contexts such as feasts.

Mortuary Data

In total, ten graves, containing fourteen individuals, were dated to the early Maxik phase (675-750 A.D.). With the exception of Burial E12-B/1, all were associated with the Structure A1 eastern ancestor shrine. Despite this shared burial locus, an examination of the data suggests significant status differences between the interred individuals.

More effort appears to have been exerted in the rituals associated with the placement of Burials A1-B/1, A1-B/2, A1-B/5, A1-B/7, and A1-B/12. Burials A1-B/5 and A1-B/7 were both cut into pre-existing architecture, and were associated with large scale construction. Specifically, the data suggests that Burial A1-B/7 stimulated the construction of Structure A1-2nd, and that the placement of Burial A1-B/5 coincided with the erection of Structure A1-1st. Although their interment did not stimulate the construction of a new shrine, it is likely that comparable energy expenditures were also witnessed during the placement of Burials A1-B/1, A1-B/2, and A1-B/12. As part of the rituals associated with the placement of these graves, large, deep chambers were cut into previous architecture. Burial A1-B/1 provides additional evidence for expanded ritual activity. This grave chamber was covered by a thick (ca. 10-20 cm) lens of chert flakes, a practice replete with symbolic significance (see Chapter 5).

Four of these five interments (A1-B/1, A1-B/5, A1-B/7, A1-B/12) also exhibit more elaborate grave forms. All are classifiable as simple crypts, following the Welsh (1988) typology. The only other burial which exhibited a grave chamber with this degree of elaboration was Burial A1-B/6. Other burials were classified as head cists (A1-B/4), capped pits (A1-B/2, A1-B/8), and haphazard cists (A1-B/3).

A similar trend was recognised in the grave goods assemblage. Specifically, the burials with the most elaborate grave chambers (Burials A1-B/1, A1-B/2, A1-B/5, A1-B/7, A1-B/12) contained the highest quantity of grave goods, and the widest range of grave good types. Burial A1-B/1 contained three ceramic vessels, a spondylus shell bead, two drilled canid teeth, and a jadeite bead. Four ceramic vessels, five obsidian blades, and two spondylus shell rosettes were discovered in Burial A1-B/2. Burial A1-B/5 contained two ceramic vessels, a limestone spindle whorl, a spondylus shell bead, seven jadeite inlays, two spondylus shell inlays, a large jadeite bead, 155 small jadeite beads, a chert biface fragment, and a number of armadillo teeth. Prior to its reopening, during the interment of Burial A1-B/5, Burial A1-B/7 likely contained two ceramic vessels and 156 jadeite beads (see Chapter 5). The individual in Burial A1-B/12 was interred with two ceramic vessels, six obsidian blades, two conch shell disks, two conch shell adornos, and a drilled freshwater clam shell. Outside of the burials discussed above, grave goods were comparatively scarce. Burial A1-B/3 contained only sections of a broken vessel, and two drilled felid teeth. Burial A1-B/4 had no grave goods at all. Burial A1-B/6 held only two obsidian blades and a jade bead. Finally, a solitary spondylus shell bead was recovered from Burial A1-B/8.

Although some of these grave goods can be classified as exotic, given the origins of the raw materials (i e., jadeite, marine shell, obsidian blades), it is clear that in some instances the variety of raw material utilised was not the highest quality available. This is particularly true for the jadeite Although solitary beads were often manufactured from high quality jadeite, the vast majority of the beads in the large Burial A1-B/5 assemblage were of a mottled, poor quality variety. Similarly, with the exception of the two spondylus shell rosettes recovered from Burial A1-B/2, none of the grave goods exhibit particularly high quality workmanship, or can be considered overly intricate in detail.

Many of the items included as grave goods were non-utilitarian Some of these may imply status positions. In particular, the various conch shell adornos, spondylus shell beads, spondylus shell inlays, spondylus shell rosettes, jadeite beads, jadeite inlays, canid tooth beads, and felid tooth beads may have been employed as visual indicators of

status position. However, none of these appear to signify the presence of exceedingly high status, or "elite" individuals. This observation is reaffirmed by the ceramic vessels recovered from the burial contexts

Whereas the number of ceramic vessels interred with a burial may be indicative of status position (see previous discussion of grave good quantities), the type of vessel included might provide even more accurate insights into social standing. Although the idea that the ancient Maya employed ceramic vessels as social currency has been lent more credence of late (e.g. Reents-Budet 1994), it has been the more elaborate polychrome vessels that have garnered the most attention in these discussions. However, it is likely that vessels of poorer quality were also involved in social transactions. The majority of the early Maxik phase (675-750 A.D.) vessels recovered from burial contexts at Zubin , given their form (e.g. large serving plates, large and small bowls, cylinder vases) and finish (e.g. fine, glossy slips, incised designs), could represent less valuable social currency that was exchanged and utilised on a more localised level, by lower to intermediate status social groups. This status determination is confirmed by the meager polychrome assemblage. Only two polychrome vessels were recovered as grave goods from early Maxik phase (675-750 A.D.) burials. Both were of average quality, and one was decorated with pseudoglyphs. Indications are that vessels of this type may have been made available to individuals of intermediate status (see Reents-Budet 1994: 139-140, 184, 227).

With reference to body position, those burials associated with elaborate grave chambers (i.e., simple crypts) and larger, more varied grave offerings, were all interred in *supine* positions, with heads to the south (Burial A1-B/1, A1-B/5, A1-B/7, A1-B/12). In contrast, those burials with relatively simple grave forms, and limited numbers of grave offerings (Burials A1-B/3, A1-B/4, A1-B/8), contained individuals in *prone* positions, with heads to the south. Thus, at least at Zubin, supine body placement appears to have been a higher status body position during the early Maxik phase (675-750 A D). It is possible that this trend has roots as far back as the late Xakal phase (100-350 A.D.), as the relatively elaborate Burial A1-B/9 exhibited this trait. One exception to this rule was Burial A1-B/6. This interment, which displayed a rather elaborate grave form (simple crypt), but contained few grave goods, held an individual who had been placed in a prone position, head to the south. Finally, Burial A1-B/2 contained a rather elaborate grave goods assemblage, but had a comparatively simple grave form (i e., capped pit).

Unfortunately, because of poor preservation, body position (supine vs. prone) could not be determined for this burial.

Having served for so long as a locus for microregional rituals, it is of considerable consequence that the Structure A1 eastern ancestor shrine became a focus for more insular activities during the early Maxik phase (675-750 A D.) This shift towards more site oriented rituals corresponded with the first evidence for residential occupation of Zubin. Whereas the shrine had previously been employed in faction-building enterprises orchestrated by the Cahal Pech residential corporate group, it now became an important tool for more localised residential corporate group activities. This is an important observation, as it helps to explain the variability recognised in the burial population. Specifically, the various interments associated with the early Maxik (675-750 A.D.) shrine structure (Structure A1) may have been interred in this important location for quite different reasons.

The more elaborate, well-furnished burials were likely interred to create ancestors for the fledgling Zubin residential corporate group. This ritual activity would have been required to both establish ties to the Zubin locus, and strengthen group solidarity. By creating ancestors in combination with this archetypal form of architecture (i.e., eastern ancestor shrine), the Zubin residential corporate group would have been employing one of the most effective means by which ties to a particular piece of land could be symbolically established (Iannone 1994c; McAnany 1995). The remainder of the burials, those exhibiting less elaborate grave forms and/or few grave goods, were probably the result of rituals conducted to open dialogue with the ancestors. Thus, these latter individuals were not ancestors, but rather offerings for ancestors (see Becker 1992). Such rituals would have again encouraged group cohesion by promoting a sense of place.

Comparatively little mortuary activity was recognised in the Zubin periphery A solitary burial (E12-B/1) was located beneath the *Ek-pay* patio surface, at the base of the Structure E12 stairs. Unfortunately, this interment was discovered near the end of the 1994 field season, and it could not be excavated. The individual appeared to have been placed within structural fill, as no grave chamber was located. The interment is thus classifiable as a simple burial (Welsh 1988). The limited excavations failed to produce any associated grave goods Thus, although the data is incomplete, when compared to the contemporaneous site core burial assemblage, this would appear to be an individual of lesser status. The placement of the burial, in front of the eastern structure in the

Ek-pay Group, suggests that the various peripheral groups may have also been "creating" ancestors at this time. If this household level ancestor veneration was occurring, it may attest to the tentative nature of the Zubin residential corporate group, and the integrative limitations of the Structure A1 community shrine.

Artefacts: Status Markers

The solitary jadeite inlayed tooth, recovered from Burial A1-B/5, may have been indicative of some status. Comparatively speaking, however, it would appear that the early Maxik phase (675-750 A.D.) residential corporate group members were of lesser status than the Cahal Pech affiliated religious practitioners who had preceded them at the site. This is suggested by the personage who was interred in Burial A1-B/9 during the late Xakal phase (100-350 A.D.), who brandished six inlayed teeth. Notwithstanding this, the jadeite inlayed tooth may still have signified an intermediate, as opposed to lower status. This is suggested by the fact that the multiple A1-B/3 burial, which has been interpreted as a sacrificial offering, contained three individuals with filed teeth. Thus, although a detailed comparative analysis is still required, it remains plausible that inlayed teeth were indicative of a higher status than filed.

As previously discussed, a number of the items discovered in early Maxik phase (675-750 A.D.) grave contexts may have also been visual indicators of status position. Such items include conch shell adornos, spondylus shell beads, spondylus shell inlays, spondylus shell rosettes, jadeite beads, jadeite inlays, canid tooth beads, and felid tooth beads. Outside of grave contexts, few status related artefacts were recovered. One conch shell adorno was found within the construction fill of the Structure A1 shrine. Excavations within the Structure A4 fill produced one sherd bead, a slate wrench fragment, and two olive shell tinklers. Finally, within the peripheral *Ek-pay* Group, two olive shell tinklers, a slate wrench fragment, and a portion of a limestone earplug were recovered from the Structure E12 fill. The similarity between those status items recovered in Structure E12, and those found in Structure A4, may suggest a degree of status affinity between the inhabitants of these peripheral and site core structures, at least with regard to the ways in which status was displayed.

Although some of the posited status items were manufactured from exotic raw materials (e.g. jadeite, marine shell), it is clear that the Zubin residential corporate group did not have unlimited access to such goods. This is evidenced most clearly in the jadeite

bead assemblage. Whereas the Zubin residential corporate group appears to have been able to procure small amounts of quality jadeite for symbolic purposes (e g. solitary jadeite beads placed in the mouths of individuals during interment; see Chapter 5), they appear to have been able to acquire only lesser quality, mottled jadeite for use in personal adornment and/or status signification (with the exception of one inlayed tooth with high quality jadeite, see above) Similarly, with the exception of the spondylus shell rosettes, none of the postulated status artefacts exhibited exceedingly high quality workmanship or excessive intricacy in production procedures. Considered as a whole, this assemblage of possible status items does not imply the presence of "elite" status Rather, the quality and quantity of these artefacts suggests that they were sumptuary items which expressed lower to intermediate status.

This observation is reaffirmed by the early Maxik phase (675-750 A.D.) whole ceramic vessels, all of which were recovered from burial contexts. The dominance of monochromes, limited use of incised decoration, and paucity of polychromes suggests the presence of lower to intermediate status individuals. More precise insights into the status of the Zubin inhabitants is provided by the only two polychrome vessels that were recovered from early Maxik phase (675-750 A.D.) burials. These were of average quality, one exhibiting an abstract design pattern, and the other a repetitive pseudoglyph band. Indications are that polychromes of this type may have been made available to individuals of intermediate status (see Reents-Budet 1994. 139-140, 184, 227). As postulated previously, it is likely that many of the whole vessels were employed in social settings, such as competitive feasts, in which *intra-site* and *microregional* status differences were both established and reconfirmed. This is suggested by the fact that the Zubin vessels exhibit moderate degrees of elaboration when compared to the more intricate polychrome vessels that were likely employed as social currency in *regional*, and *macroregional* social transactions (see Reents-budet 1994).

In sum, the overall quality and quantity of status related artefacts suggests that Zubin was inhabited by individuals of intermediate and lower status during the early Maxik phase (675-750 A.D.). The relative paucity of status goods also indicates that the Zubin residential corporate group was limited in its ability to cultivate residential corporate group allegiances through the dispersal of such items. This might imply that the residential corporate group's strength lay in its control of land (e g. McAnany 1993), which it claimed and maintained through the Structure A1 ancestor shrine (McAnany 1995). Additionally, this data also implies that the Cahal Pech factional alliance was

relatively weak at this time, as factional alliances also call for the circulation of status items to further group solidarity

Cache Data

A limited number of caches were dated to the early Maxik phase (675-750 A.D.). Four of these were partial vessel caches made in conjunction with termination and/or dedication rituals associated with Structure A4 (Caches A4-F/1, A4-F/2, A4-F/3, A4-F/4). Another, Cache A1-F/1, proved to be an intrusive cut which had been made into an earlier burial in order to retrieve grave goods for reburial elsewhere (see Chapter 5). Finally, four obsidian blades were discovered in a disturbed cache feature on the summit of Structure A1. None of the cache forms were elaborate, and contents were restricted to a few items of moderate quality. This indicates that little energy was expended in cache formation, or acquisition of cache items.

A number of burials may have been interred as cache-like offerings during the construction of new architectural features (see Becker 1992). Burial A1-B/4, given its lack of grave goods and prone body position (see below), appears to have been a dedicatory offering which was placed during the construction of Structure A1-1st. Similarly, the location (intrusive into Structure A1-3rd), prone body position (see above), and paucity of grave goods (one spondylus shell bead), suggests that Burial A1-B/8 may have been an offering associated with the termination of Structure A1-3rd. The contemporaneous Burial A1-B/6, given its placement within the A1-2nd construction fill, prone body position (see above), and limited grave goods (two obsidian blades, one jadeite bead), may represent a dedicatory offering. Finally, the five individuals in Burial A1-B/3 may also represent a ritual offering focusing on Structure A1-1st. These individuals, given their ages (young adult to middle age), sex (both male and female), evidence for cranial deformation, and filed teeth, may represent a family of intermediate or lower status who were ritually killed as sacrificial captives. The paucity of grave goods (sherds from a partial vessel, two felid tooth beads), simplicity of the grave chamber (haphazard cist), and prone body position (see above), reaffirms the notion that this interment represents an offering of some sort.

The paucity of early Maxik phase (675-750 A.D.) caches may imply that this type of offering was of limited import to the Zubin residential corporate group. On the other hand, it may also suggest that within the microregion caching was associated with higher

status activities, such as period ending rituals, which were not conducted at Zubin. The presence of the cache-like burials, however, reconfirms the importance of the Structure A1 ancestor shrine as a focus for ancestor veneration rituals Undoubtedly, such rituals were the primary symbolic means by which the Zubin residential corporate group was creating its identity within the microregion, and solidifying its group membership on an intrasite level.

Artefact Data: Domestic Architecture

A variety of artefacts were recovered from residential contexts dating to the early Maxik phase (675-750 A D.). The largest quantity, and greatest variety of artefacts were associated with Structure A4, the primary Zubin residence. This assemblage included both utilitarian (obsidian blades, spindle whorl, manos, metates, bifaces, grinding/polishing stones, scrapers, drills, pestle, utilised flakes) and non-utilitarian (ceramic disk, sherd bead, olive shell tinklers, slate wrench) artefact types. The former reflect a wide range of domestic activities. The latter may be status items. In contrast, the secondary site core residence, Structure B8, contained no non-utilitarian artefacts, and few domestic items (obsidian blades, metate fragment). The data appear to confirm the subsidiary character of this structure. The other early Maxik phase (675-750 A.D.) residential structure that was tested was located in the periphery. This structure, E12, contained an artefact assemblage comparable to that recovered from Structure A4. Non-utilitarian artefacts included olive shell tinklers, a limestone earplug fragment, and a slate wrench fragment. Utilitarian artefacts were also present in moderate numbers (e.g. obsidian blades, biface fragments, metate fragments, and a bifacial chopper). These data indicate that considerable domestic activity also occurred within the Zubin periphery during the early Maxik phase (675-750 A.D.). The presence of a sizeable, and comparable non-utilitarian assemblage in Structure E12 also implies that the Zubin residential corporate group consisted of a complex arrangement of social statuses, both within and outside of the site core.

None of the artefacts that were recovered from domestic contexts exhibited exceedingly high quality workmanship, or evidence for intricate production procedures. Similarly, few were produced from exotic raw materials (e g olive shell tinklers). In sum, the assemblage implies that the fledgling Zubin residential corporate group was limited in its ability to accumulate large numbers of high quality status items Those that

were obtained appear to be sumptuary goods, indicative of intermediate or lower status, as opposed to "elite" items. The inability to amass large numbers of sumptuary items must have inhibited the residential corporate group's strength, and tempered its ability to cultivate group cohesion. In the end, the strength of the residential corporate group must have lain in its control of land (e g. McAnany 1993), and the Structure A1 ancestor shrine which was its primary connection to this resource (see McAnany 1995).

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

No epigraphic items were recovered from early Maxik phase (675-750 A.D.) deposits. This implies that the Zubin residential corporate group did not have access to written texts, and thus it was likely not a member of Maya society's upper echelons. Iconographic items were also scarce. Possible iconographic artefacts include the pseudoglyph band on the vessel from Burial A1-B/12, and the slate wrench fragments from Structures A4 and E12. Unfortunately, the symbolic significance of these items remains a mystery. In sum, the Zubin residential corporate group does not appear to have participated in social transactions at the same level as the upper tiers of society.

Potential wealth items include whole vessels, sherd beads, conch shell adornos, olive shell tinklers, spondylus shell beads, spondylus shell inlays, spondylus shell rosettes, jadeite beads, jadeite inlays, slate wrenches, limestone earplugs, canid tooth beads, and felid tooth beads. Although this assemblage is made up of a wide variety of "wealth" related artefacts, these items were recovered in extremely small numbers. This data suggests that the Zubin residential corporate group was not particularly wealthy, at least with regard to the ability to acquire objects of material wealth. As stated previously, the strength of the Zubin residential corporate group must have lay in its control of the surrounding land resources.

Little evidence exists for craft production. The presence of both biface preforms and biface preform discards suggests that some household lithic production was conducted both within the site core and periphery. The recovery of a piece of sawn slate debitage also implies that some small-scale slate production may have been carried out at the household level.

Settlement Data

With the onset of the early Maxik phase (675-750 A.D.) residential structures were first added to Zubin's core of ritual/administrative architecture. Although these additions did not dramatically increase the overall size of the site, they did serve to increase its complexity. Except for the absence of a few key components (e.g. ballcourts, stelae, altars, and causeways), Zubin began to resemble more closely the site morphology of upper level settlements, albeit on a much smaller scale. Like these larger centres, Zubin was now the locus of residential, ritual, and administrative activities; although again on a significantly smaller scale.

The residents of the Zubin site core appear to have had considerable power over the distribution of population. This is implied by the fact that a fairly large peripheral population settled in the vicinity of the Zubin site core sometime shortly after its initial occupation. The construction of at least one auxiliary feature, Chultun 2, coincided with the early part of this settlement expansion (i.e., beneath Structure E12). Unfortunately, it remains difficult to ascribe a specific function to this feature, as time limitations ruled out excavation. This infusion of residential activity does not just reflect an increase in residential population, but also a concomitant expansion of residential corporate group membership. Zubin would have thus resembled McAnany's (1993, 1995) "heterogeneous households" or "multifamily residential compounds". According to McAnany, the formation of such groups was quite common during the Late Classic period (600-875 A.D.), as power over limited land resources led to control over the distribution of non-landholding social groups.

The question remains, why did the nature of the site change so dramatically at this time, and how did the Zubin residential corporate group initially gain control over this important locus? In developmental terms, Zubin reflects the trends discussed in Freidel's (1981) pilgrimage fair model. As outlined in Chapter 1, Freidel (1981:378) proposes that during the Formative period "all Maya centres functioned as pilgrimage shrines, way stations, or termini in a pan-Maya network". Following Freidel, Zubin may have initially functioned as a locus for the "public festivities" which served to both integrate the microregional community and entrench it within the "larger regional network " The site may have originally functioned as a shrine dedicated to microregional community deities (as opposed to it having been a "household" or "family" shrine), but with time it may have evolved into an important ritual/administrative node within the

broader region (see Freidel 1981:380). Freidel concludes that it is only with the Classic period (600-875 A D) that such sites began to sustain residential populations. In sum, this long term trend may provide a partial explanation for the changing character of the Zubin locus

It is also likely that the changes which occurred at Zubin during this time reflect a weakening of both the Cahal Pech residential corporate group, and its factional alliance. In order to maintain itself the Cahal Pech residential corporate group may have had to adopt a power-sharing posture, one which included the loosening of control over particular sections of arable land and loci of symbolic significance, in order to appease more important members of the factional alliance.

Architecture Data: Residential

As previously discussed, residential architecture was added to both the site core and periphery during the early Maxik phase (675-750 A.D.). Structure A4 is considered to have been the primary Zubin residence. This is suggested by the fact that it was constructed within the *Ac* courtyard, the ritual/administrative focus of the site. This structure received near continuous architectural modification (A4-8th through A1-1st) during the early Maxik phase (675-750 A.D.). The associated courtyard surface was also apparently refloored at least once during this time. Excavations in Structure A4 indicated that this residence increased in size, elaboration, and complexity during this period. Whereas Structure A4 began as a relatively small, single room building, subsequent construction activity expanded and transformed it into a comparatively spacious three room residence, each room having its own outset stair. Over time, these rooms witnessed the addition of bench features, and an increase in overall interior living space. The use of double-faced masonry walls was also implemented during the final two construction phases (A1-2nd and A1-1st). However, this elaboration was restricted to the western room, implying that interfamilial status differences may have existed. In final form, Structure A4 acted to completely close off the southern portion of the *Ac* courtyard, thus forming a highly restricted residential/administrative/ritual focus for the site. This suggests further status differences between those people who inhabited this courtyard, and those that resided in the periphery.

The discovery of post-holes confirmed that Structure A4 was surmounted by either a pole-and-thatch or wattle-and-daub superstructure. With reference to

construction methods, it is likely that the majority of raw materials were procured within the vicinity of the site. Well-dressed cut-stones were utilised in the construction of retaining walls, stair risers, stair sides, and double-faced masonry walls. Quality plaster appears to have been employed throughout. Although poor dry-stone core fill was used during the earlier construction phases, quality mortar fill was employed in the last few construction efforts. This trend may reflect an increase in residential corporate group strength over time, as expressed in the ability to invest more energy in construction materials and methods. That status differences existed within the residential corporate group itself is implied by the comparatively less elaborate residential architecture found within both the site core and periphery of Zubin.

During the early Maxik phase (675-750 A.D.) a secondary residence (Structure B8) was also constructed within the *Bac-ha* courtyard. The subsidiary character of this residence is suggested by its placement in the less prominent courtyard, its smaller size, relatively simplistic plan, and poorer construction techniques. Evidence for at least two construction phases were identified during excavations (B8-3rd and B8-2nd). Structure B8 contained only one room, and a solitary outset stair. No signs of double-faced masonry walls or interior benches were recognised. It is likely that either a pole-and-thatch or wattle-and-daub superstructure surmounted the building platform. As with Structure A4, it would appear that the majority of raw materials employed in the Structure B8 construction phases were procured locally. Well-dressed cut-stones were employed in the construction of retaining walls, stair risers, and stairsides. In contrast to Structure A4, which contained evidence for the use of quality mortar fill during its last few construction phases, only dry-stone core fill was employed during the contemporaneous Structure B8 construction efforts. This implies that less labour was available for construction of this structure, and suggests that outside of the higher status members of the primary Zubin family, the power to produce high quality residential architecture was limited. This insight was confirmed by excavations within residential structures in the Zubin periphery.

During the latter part of the early Maxik phase (675-875 A.D.) residential construction was also initiated in the peripheral *Ek-pay* Group. At this locus Structure E12 was constructed over Chultun 2, effectively terminating the use-life of this feature (this act may have had some as yet undetermined symbolic significance). Structure E12 witnessed one major construction effort (E12-2nd), and at least two-reflooring events during the early Maxik phase (675-750 A.D.). In terms of size, elaboration, simplicity of

plan, and quality of construction techniques, Structure E12 resembles Structure B8 in the site core. No evidence for double-faced masonry walls or interior benches were found in association with this structure. In addition, a wattle-and-daub or pole-and-thatch superstructure likely surmounted the building platform. The Structure E12 construction methods were also similar to those revealed by Structure B8. These included the use of quality plaster, well-dressed cut-stones in retaining walls, and poor quality dry-stone core fill. Once again, it is likely that the majority of construction materials were procured within the vicinity of the Zubin locus. In contrast to Structure B8, Structure E12 did not exhibit an outset stair. Concomitantly, there were no indications that a raised patio was constructed in front of this structure. These missing features may reflect some minor status differences between the residents of Structure B8 and E12.

It is also likely that residential occupation was first initiated within the *Familia* Group during the early Maxik phase (675-750 A.D.). This is evidenced by the construction of a raised platform, and the probable erection of Structure F16. Unfortunately, Structure F16 was not tested during the project, thus its construction sequence cannot be confirmed. The presence of the raised platform does suggest, however, that some residential architecture was present. Testing indicated that Structure F14 was constructed during the subsequent late Maxik phase (750-875 A.D.), thus Structure F16 remains the best candidate.

Architecture Data: Non-Residential

The changing nature of the Zubin locus is readily reflected in the type of non-residential construction that was undertaken at the site during the early Maxik phase (675-750 A.D.). It is apparent that the de-emphasis of the Structure C9 shrine culminated at this time. As discussed previously, the Cahal Pech residential corporate group appears to have terminated construction on this important Formative period shrine in the late Xakal phase (100-350 A.D.), and shifted its attention to the more fashionable eastern ancestor shrine (Structure A1). However, it appears that both shrines continued to be employed in unison well into the Classic period. This was to change during the early Maxik phase (675-750 A.D.) Specifically, although the initial phases of construction associated with the Structure A4 residence (A4-8th through A4-5th) maintained access to the adjacent *Cutz* raised platform, and the C9 shrine structure, subsequent modifications closed off this access, thereby detracting from this portion of

the site. These structural alterations thus acted to underscore the *Ac* courtyard, and downplay one of the primary vestiges of Cahal Pech control at the site. This may once again reflect a weakening of the Cahal Pech residential corporate group, and its broader factional alliance.

This re-emphasis on the *Ac* courtyard was probably a legitimising ploy undertaken by the fledgling Zubin residential corporate group. In playing up the *Ac* courtyard, and its eastern ancestor shrine, the Zubin residential corporate group would have been stressing one of the most effective architectural agglomerations through which a residential corporate group can claim roots to a specific place. The rapid series of shrine modifications and burial interments (see above) were likely undertaken to "create" ancestors, and reaffirm dominion over the locus That there was sense of urgency behind these legitimising tasks is suggested by the fact that a great effort was made to expeditiously increase the visual prominence of the Structure A1 shrine In total, two major construction efforts were recognised (A1-2nd and A1-1st). The first acted to increase the overall size of the structure in comparison with those that had preceded it. However, it was with the final construction phase that the shrine witnessed its most dramatic increase in height. This effort produced a true steep-sided pyramidal structure. Neither of the substructures appear to have supported a superstructure, although there is an outside chance that they were surmounted by pole-and-thatch or wattle-and-daub buildings. In association with the first construction phase the *Ac* courtyard surface was raised slightly, and refloored at least once. No concomitant courtyard construction was taken-up in association with the final construction effort. That only limited courtyard construction coincided with the increase in shrine size suggests that the emphasis was on the structure itself.

In general, the quality of these architectural features was quite good. Well-dressed cut-stones were employed throughout Thick plaster surfaces were also present, although these had been almost completely destroyed on the latter structure. Mortar fill was utilised in ballast and backing masonry deposits. The only expedient construction method recognised was the use of dry-stone core fill. These deposits may have been employed to achieve the greatest height with the least energy expenditure The presence of this poor quality fill may once again attest to the urgency of the construction efforts, and the relative weakness of the fledgling Zubin residential corporate group Although comparatively large in scale, the Structure A1 rebuilding

events probably did not require the acquisition of raw materials from outside of the locality.

In conjunction with the shrine construction activity, the Zubin residential corporate group also undertook some limited refurbishment of the Structure A3 administrative building (A3-2nd and A3-1st). Although these renovations were limited in scope (e.g resurfacing of the upper terrace, axial stair, and associated courtyard), the quality of the plaster and fill deposits employed was very good Their restricted nature implies that all raw materials were likely procured from within the vicinity of the site itself. These minor modifications may have been undertaken by the Zubin residential corporate group in order to lay claim to Structure A3, and in doing so transform this piece of architecture into a legitimate administrative focus for the larger residential corporate group. That such administrative features and associated activities were taken over by local authorities again suggests that the power of the Cahal Pech residential corporate group was waxing, as was its factional alliance.

One last piece of non-residential architecture, Structure B6, was constructed during the early Maxik phase (675-750 A.D). This small, but elaborate piece of architecture, was likely a special function structure, possibly a sweathouse (see Chapter 4). It may have been employed in private rituals conducted by key members of the Zubin residential corporate group. Not only does the size of this small structure suggest exclusion of large numbers of residential corporate group members, its placement would have acted to partially restrict access into the *Bac-ha* courtyard. This fostering of restricted site core access lends further credence to the notion that some status differences existed between inhabitants of the main architectural assemblage, and those who resided in the periphery.

Excavations within Structure B6 isolated two construction phases datable to this time span (B6-4th and B6-3rd). The earliest of these (B6-4st) was only partially exposed, thus little can be said about the type of architecture present. The second phase (B6-3rd) is more completely understood. This small structure exhibited two interior benches, a narrow doorway, and lower walls of double-faced masonry. It is likely that pole-and-thatch or wattle-and-daub was employed in construction of the upper walls and roof. The application of good plaster, some of which had been painted red, also added to the quality of the structure. Well-dressed cut-stones and mortar fill were used throughout. Given the small size of the structure, it is likely that local materials would have sufficed to carry out these construction efforts

Labour Data

Given the changing nature of the site, it is not surprising that the character of the labour relations were also transformed. Specifically, the local residential corporate group now became the primary labour force. The labour relations of the early Maxik phase (675-750 A.D.) were thus simplified in comparison to the more community oriented labour relations that had been operative at the site prior to this time (see above). With reference to residential architecture, it is likely that familial reciprocal labour was employed to carry out the majority of construction efforts both within the periphery and site core (e.g. Structures A4, B8, E12). This is implied by the limited extent of the construction efforts, and the relatively unelaborate architectural forms produced. One exception to this may be the last construction effort at the Structure A4 locus. The addition of double-faced masonry walls might have required specialist skills, implying that familial contractual labour may have been employed.

Non-residential construction at the site (Structures A1, A3, B6), given the comparative increase in elaboration (e.g. double-faced masonry walls, extensive use of plaster), may have also required specialist participation. Thus, familial contractual labour may have been utilised. On the other hand, given the ritual/administrative character of these buildings, their construction may have been carried out via festive custodial labour. No evidence for highly organised labour relations was recognised in the production of either basic or non-basic resources. Thus, familial reciprocal and/or familial contractual labour probably sufficed to carry out these tasks. Finally, the limited extent of the ritual activity (e.g. caches and burials) does not appear to have required large scale labour efforts. Thus, these activities may have been carried out through familial reciprocal and/or familial contractual labour. However, given the nature of such activities, it is also plausible that festive custodial labour played a role in these endeavours.

Summary: Microregional Social Organisation in the Early Facet Maxik Phase

Once again, little data has been published concerning the Late Classic period (600-875 A.D.) at Cahal Pech. Indications are, however, that the trends witnessed in the previous Xnipek phase (600-675 A.D.) continued unabated during the subsequent early Maxik phase (675-750 A.D). Thus, it is likely that further constructional elaboration was implemented in order to enhance the public/ritual/administrative features at the site.

In addition, some of the various uncarved stelae monuments discovered at Cahal Pech were likely erected at this time It is also probable that efforts were made to increase the separation between the principal members of the ruling caste and other members of the microregional community, by further restricting access to residential courtyards and associated sacred space (e g. Awe et al. 1991). This suggests that both caste distinctions and status differences continued to be emphasised at this time. On one hand, these accomplishments might be considered indicative of the enduring strength of the Cahal Pech residential corporate group, and by association its factional alliance. However, as has been alluded to previously, some of the data suggest that these social units were starting to weaken at this point in time.

The Zubin data provides evidence for this posited decline. Specifically, during the early Maxik phase (675-750 A.D.) the Cahal Pech residential corporate group appears to have lost control of Zubin for the first time. Indications are that this reflects the weakened state of the Cahal Pech residential corporate group, which may have been forced to adopt a power-sharing strategy with some of the more prominent members of the factional alliance. Evidence for this Late Classic power-sharing has been documented at far larger sites such as Copan (Fash 1991) and Palenque (Schele 1991). Culbert (1991:325-326) has postulated that this trend resulted in "changing political conditions and...stresses that were soon to cause the Maya collapse." It is plausible that these social problems resulted from the difficulties that the Cahal Pech residential corporate group was having in maintaining the strict caste divisions that had become characteristic during the early part of the Late Classic period (Xnipek phase, 600-675 A.D.).

With reference to Zubin, part of this power-sharing may have entailed the discharging of certain landholdings. Although Zubin was not as important as it had been during the Middle and Late Formative periods (900 B C.-350 A.D.), it probably persisted as a subsidiary administrative/ritual site into the early Maxik phase (675-750 A.D.). Thus, possession of such a prominent locus would have brought prestige to the group that acquired authority over it. That the residential corporate group that gained jurisdiction over Zubin was of moderate size, and intermediate status (see above), suggests that the Cahal Pech residential corporate group had also been forced to relinquish control of key architectural loci to some of the less prominent members of the factional alliance. If so, this would imply that a very diverse social landscape resulted from the power-sharing process That the Zubin residential corporate group exhibits evidence for internal ranking (i e , in grave types, grave goods, body position, access to

status goods, residential elaboration, restricted access features, proximity to sacred space), also attests to the complex nature of the social landscape at this time This social complexity is confirmed by some of the other peripheral excavations.

Valuable comparative data has been produced through excavations at the Zinic group (see Figure 3.3), located ca. 450 m south of the Cahal Pech site core (see Conlon 1992; Conlon and Awe 1991) Indications are that Zinic accommodated a residential population by at least the late Xakal phase (100-350 A.D.). During investigations at this group a cache of eccentric lithics, an uncarved stela monument, and an elaborate crypt were discovered. These all date to the early Maxik phase (675-750 A.D.). The crypt contained an adult individual with five pottery vessels (including high quality polychromes), a jadeite bead, pendant, and earflares, and two spondylus shell disks (Conlon and Awe 1991:13). This would appear to be a high status burial, possibly of a member of the upper caste. This identification is reaffirmed by the presence of other ideological indicators of ruling caste affiliation (e.g. stela, eccentrics). A number of status markers were also present (e.g. jadeite beads, earflares, pendants), although they were limited in number outside of the elaborate crypt. Thus, this group was probably the ritual/residential compound of a residential corporate group with ruling caste affiliation (see Iannone and Conlon 1993). There is nothing to suggest that the inhabitants of Zubin were also members of this ruling caste. Rather, Zubin's less elaborate graves (simple crypts vs. elaborate crypts), poorer grave goods assemblages, lack of stelae, limited access to "elite" items (fine polychromes, jadeite artefacts), and inability to procure written texts in any form (on stelae, altars, or ceramics), implies that it was part of the lower caste.

Nevertheless, when one overlooks the presence or absence of ruling caste indicators (stelae, eccentrics, elaborate crypts), the differences between Zinic and Zubin are not as glaring as they originally appear. Similarities in the size and elaboration of ritual architectural are evident. Concomitantly, a comparative assessment of the Zinic and Zubin status marker assemblages suggests that, although status differences did exist between these two groups, the social gulf was not great. It is also telling that the primary residential structure at Zinic (Structure 5) is comparable to its counterpart at Zubin (Structure A4). The only similar structure within the Cahal Pech site core is located in what has come to be known as the "service plaza", Plaza F (see Figure 3.4). Within this service plaza the dominant structure, F-1 (see Figure 3.4), is a long-low structure analogous to Structure A1 at Zubin, and Structure 5 at Zinic. Awe (1992 165)

has concluded that "F-1 may have served as a residence for lower status elites, or for elite attendants. This is suggested by the size of the structure *vis a vis* other structures in the site core, and by the form and style of the architecture" (see also Awe and Campbell 1988:38-39; Awe et al. 1991). Thus, this courtyard may have housed either a lower ranking group with ruling caste affiliation (e g. like Zinic), or a group of retainers with lower caste affiliation (e.g. like Zubin).

How, then, does one explain the fact that in some instances members of the ruling and lower castes inhabited similar abodes? It is my contention that this reflects the scenario in which social strata crosscut caste boundaries Whereas the Zinic inhabitants may have been members of the ruling caste, as suggested by their ability to employ stelae and eccentrics, procure fine polychromes and jadeite, and construct more elaborate grave chambers, they may still have been part of the same broad social stratum as the occupants of Zubin, and the "service plaza" in the Cahal Pech site core. That is, these groups shared similar access to *essential* or *basic* resources, as reflected in the comparable housing units, and may have had *similar* access to status markers, aside from those that were indicative of caste affiliation. In sum, it is my belief that these three groups were part of a broad, heterogeneous middle stratum that cross-cut the two primary societal divisions of ruling and lower caste. This is not unlike the situation discussed by Carmack (1981:152-154) for the ethnohistoric Quiché Maya, amongst whom the middle stratum consisted of lesser nobles and wealthy commoners. Nor is it different from the Late Classic period scenario presented by Sharer (1994:510), in which the middle stratum is considered to have been "composed of prosperous commoners and the lower ranks of the elite (Sharer 1994:510).

In sum, these three social units may have come to share membership in this middle stratum in a variety of different ways. Zinic may have achieved its middle stratum standing due to the remote nature of its kinship ties to the Cahal Pech ruling family (i.e., they were "lower ranking elite"). The inhabitants of the Group F "service plaza", pending further excavation, may have obtained their middle stratum position through either spatial proximity to the Cahal Pech ruling family, and as a result the *noblesse oblige* cultivated through years of dedicated service (i.e , they were "prosperous commoners", at least in social terms), or their distant kinship connection to this same ruling family (i e , they were "lower ranking elite"). Finally, the Zubin residential corporate group may have achieved their middle stratum standing through control over the prominent Zubin locus, and its associated land resources, which resulted from the

power-sharing posture adopted by the Cahal Pech residential corporate group (i.e., they were "prosperous commoners")

In conclusion, during the early Maxik phase (675-750 A.D.) a multifarious social milieu probably existed within the Cahal Pech microregion. Ranked statuses, corporate groups, factions, castes, *and* strata were likely present. The number of ranked statuses may have increased significantly at this time. The existence of a greater number of larger, residential corporate groups is also likely. The factional alliance appears to have weakened somewhat, although the power-sharing strategy adopted by the Cahal Pech corporate group may have sufficed to provide some stability Indications are that, although attempts were made to exacerbate caste differences, the boundaries between the ruling and the lower caste were becoming increasingly blurred. In combination with the power sharing undertaken to solidify the factional alliance, this situation would have been conducive to the formation of a middle stratum of "prosperous commoners" and "lower ranking elite". This heterogeneous social stratum would have cross-cut the broader caste divisions. Thus, a ruling and lower caste would have coincided with at least three social strata (e.g. upper, middle, and lower; see Figure 2.5).

LATE FACET MAXIK PHASE (750-875 A.D.) SOCIAL ORGANISATION

Osteological, Paleopathological, And Demographic Data

No burials were recovered from late Maxik phase (750-875 A D.) deposits. Thus, little can be said of osteological, paleopathological, and demographic characteristics. Some limited data on diet has been produced by the preliminary faunal examinations The analysis to date shows that freshwater shellfish continued to be employed as a dietary item (Stanchly 1993, 1994, 1995a; see also Healy et al 1990). As stressed throughout, it is also possible that at least some of these shellfish represent feasting.

Mortuary Data

No burials were interred at Zubin during late Maxik phase (750-875 A.D).

Artefacts: Status Markers

Few status markers were recovered from late Maxik phase (750-875 A.D) deposits. Those that were recovered represent a variety of raw materials, but none exhibit high quality workmanship, or overt intricacy. Within the Zubin site core only one artefact of high quality, exotic raw material was recovered. This artefact, a small conch shell adorno, was retrieved from the Structure A4 humus deposit. Only one other potential status marker was crafted from a high quality, exotic raw material. This artefact, a fragment of a greenstone celt, was recovered during operations in the periphery, during excavation of the Structure F14 fill deposit. Other potential status markers were produced from poor quality, local raw materials. These included one carved section of freshwater clam shell, and one limestone bead, both retrieved from the Structure A4 humus deposit, and a second limestone bead, discovered within the Structure A1 surface deposit. None of these artefacts need have been produced outside the microregion, although data on craft production remains limited at the time of writing.

As the reader can see, many of these artefacts derive from disturbed deposits (surface, humus, fall). With the exception of the greenstone celt fragment, recovered from a sealed fill deposit, none of these artefacts can be unequivocally dated to the late Maxik phase (750-875 A.D.). In fact, it is plausible that many of these artefacts date to the preceding early Maxik phase (675-750 A.D.). This is especially likely for the artefacts from Structures A1 and A4, both of which failed to display evidence for any late Maxik phase (750-875 A.D.) construction.

In summary, few status markers were recovered from late Maxik phase (750-875 A.D.) deposits. Considering both the poor quality workmanship, and raw materials, these are best interpreted as sumptuary items Indications are that few, if any, high status individuals resided at Zubin during the final phase of occupation. The artefactual data also suggest that the status differences between the inhabitants of the Zubin site core and its periphery were minimal at this point in time This apparent inability to procure status items in large quantities suggests that the Zubin residential corporate group had become relatively weak. The limited number of status artefacts might also reflect a continual decline of power within the Cahal Pech corporate group, as reflected in its inability to provide sumptuary items to maintain its factional alliance.

Cache Data

One cache was discovered within late Maxik phase (750-875 A.D.) deposits. This cache, designated A2-F/1, was encountered beneath a stairside This location suggests that the cache was placed as a dedicatory ritual associated with the construction of the new stair. The cache itself contained sherds from a least three Maxik phase (750-875 A D.) vessels (Dolphin Head, Mount Maloney, and Cayo ceramic groups). The presence of the Dolphin Head sherds suggests that the cache may have been placed early in the late facet Maxik phase (750-875 A.D.). In association with the sherd cluster were three chert bifaces. These are of the "general utility" type, and thus do not reflect high quality manufacturing procedures. However, the combination of three bifaces may have some symbolic significance. Ball and Taschek (1986.39) have suggested that the three biface cache was a "cultural fingerprint" within the upper Belize Valley region. These researchers found three biface caches at the "minor centre" of Nohoch Ek, and the smaller Guerra site. Although data on microregional artefact production is limited, indications are that all of these items could have been produced locally.

Artefact Data: Domestic Architecture

Excavations within the residential structures in the Zubin site core (Structures A4 and B8) and periphery (Structures D10, D11, E12, F14) produced a wide variety of artefacts. It should be noted at the outset that the items from Structure A4 are only tentatively dated to the late Maxik phase (750-875 A.D.). This is due to the fact that no construction is postulated to have been undertaken within Structure A4 during this phase. All of the Structure A4 artefacts derive from surface, humus, and fall deposits. Thus, there is a good chance that all or some of these artefacts date to the preceding early Maxik phase (675-750 A D).

A number of the artefacts recovered from the residential contexts are reflective of domestic activities. These include manos, metates, obsidian blade fragments, spindle whorls, celts, bifaces, burin/gravers, drills, scrapers, knives, utilised flakes, and hammerstones Although the entire range of artefacts was not recovered from each individual structure, the majority of these artefacts were encountered in all domestic contexts that were excavated With the exception of obsidian, none of these artefacts are manufactured from what can be considered "high" quality raw materials, and none exhibit

exceedingly high quality workmanship, or overly intricate production procedures. Evidence for inter-regional and long distance exchange is suggested by the presence of some "exotic" raw materials The obsidian blades, or at least the cores from which they were obtained, must have been introduced via macro-regional trade relations. Whether the Cahal Pech residential corporate group was a direct, or secondary node in the subsequent regional distribution of these blades cannot be determined with the available data. The majority of manos and metates were likely manufactured from semi-exotic raw materials (e.g. granite) obtained within the region, from the nearby Maya mountains. Again, the sequence of exchange which brought these items to Zubin remains open for investigation.

Non-utilitarian items were found in lesser numbers within the Zubin residential structures. During the late Maxik phase (750-875 A.D.) the distribution of such items was restricted, for the most part, to residential contexts within the Zubin site core. The only non-utilitarian artefact recovered from a residential context in the periphery, a section of worked conch shell, was retrieved from Structure F14. Within the site core two limestone beads, a conch shell adorno, a fragment of a ceramic whistle, and a section of a carved freshwater shell were recovered from Structure A4. As previously discussed, because no actual construction appears to have been undertaken at the Structure A4 locus during this phase, and the recovery contexts are of a disturbed variety (i.e., surface, humus, fall), it is plausible that a large number of these artefacts date to the preceding early Maxik phase (675-750 A.D.). Excavations within the B8 residential structure, which does contain late Maxik phase (750-875 A.D.) construction, produced a ceramic disk, a ceramic bead, a crude, miniature vessel, and two figurine fragments. The latter two items are probably Formative in date, their presence in the Classic period deposits a result of redeposition.

In summary, few non-utilitarian artefacts were recovered from late Maxik phase (750-875 A.D.) residential contexts Of these, only the two limestone beads, conch adorno, and ceramic bead can be interpreted as possible status items. The paucity of such items, and the poor quality of those recovered, suggest that few if any Zubin individuals possessed high status during this phase. The limited number of artefacts produced from exotic raw materials (one conch shell item), and the overall poor quality of the entire assemblage, again attest to the relative weakness of the Zubin residential corporate group during this phase Concomitantly, it also implies that the Cahal Pech

residential corporate group's power was waxing, and its factional alliance disintegrating

Iconographic, Epigraphic, Wealth, And Craft Specialist Data

With the exception of the figurine fragments, which are likely redeposited Formative period (900 B.C.-350 A.D.) artefacts, no iconographic or epigraphic items were recovered from late Maxik phase (750-875 A.D.) deposits. Wealth items were limited, consisting of one conch shell adorno. It is unlikely that any of the other non-utilitarian items, such as limestone beads, ceramic beads, or carved freshwater artefacts, were considered wealth related. Some limited evidence for craft production does exist. The worked conch shell sections recovered from Structures B8 and F14 imply that some limited shell artefact production may have been undertaken on a household level both in the site core and periphery. The presence of spindle whorls, retrieved from tentative late Maxik phase (750-875 A.D.) deposits in Structure A4, and solid late Maxik contexts in Chultun 1 (Operation 101) and Structure F14, may reflect some weaving at the household level. The size of the whorl-holes suggest that these may have been used to spin cotton (Killpack 1995). Finally, the discovery of a number of hammerstones, in various contexts within the site core, confirms that some small-scale lithic production was conducted at the site.

Settlement Data

Little evidence exists to suggest that the site core and its surrounding settlement were dramatically altered during the late Maxik phase (750-875 A.D.) The construction of the *Danta* Group (Structures D10 [D10-1st], and D11 [D11-1st]), which was initiated and completed at this time, and the addition of Structure F14 (F14-1st, F14-2nd) to the *Familia* Group, did increase the overall density and complexity of the peripheral settlement surrounding the site core. That the peripheral population did increase slightly is reaffirmed by the construction of two new water management facilities. During the late Maxik phase (750-875 A.D.) a large reservoir was established adjacent to the *Familia* Group. The construction of this feature was probably stimulated by the growth of the *Familia* residential group, as it coincided with the construction of Structure F14 (see above). At the same time Chultun 1 (Operation 101), a feature clearly associated with water collection (Iannone 1994a:104), was constructed on a slight break in slope,

ca. 85 m east of Structure A1. This chamber may have been constructed to replace Chultun 2, which had been concealed beneath Structure E12 in the preceding early Maxik phase (675-750 A.D). Although some additional structural refurbishment projects were taken up, both within the site core and the periphery, the restricted nature of these undertakings suggests that the size of both the peripheral and site core populations did not increase significantly. The settlement data also indicate that the Zubin population declined near the end of the late Maxik phase (750-875 A.D.), when site abandonment is postulated to have occurred.

Architecture Data: Residential

Residential architecture within both the site core and periphery received some slight modification during the late Maxik phase (750-875 A.D.). Within the site core residential construction activity was limited to the secondary residence (Structure B8) located in the *Bac-ha* courtyard. The primary Zubin residence, Structure A4, saw no construction during this phase. This reaffirms that the residential corporate group was weakening at this point in time, and that as a result the principal family was unable to upgrade their own residence.

Within the *Bac-ha* courtyard Structure B8 was completely rebuilt (B8-1st). The significant modification was the extension of the upper platform to the east. This surface proved to have been resurfaced at least once during this period. Although the complexity of the residential plan was not significantly increased, the modifications did provide for more residential space within the structure. The concomitant stair elaborations, and resurfacing of the associated *Bac-ha* courtyard surface, added to the increased quality of this residential building. Although a low masonry wall may have formed the basal portion of the superstructure walls, there was nothing to suggest that the upper walls and roof were constructed from anything more elaborate than pole-and-thatch or wattle-and-daub. Well-dressed cut-stones and high grade mortar fill were employed in these modifications. Evidence provided by some preserved sections of the platform surface imply that quality plaster continued to be utilised. All of these raw materials were likely procured locally.

Within the periphery, Structure E12 (E12-1st) received structural modifications which acted to elevate, but not increase the overall size of its interior living surface. In fact, the addition of a frontal terrace decreased interior living space. This feature did,

however, increase the overall complexity of the building In conjunction with these activities, an axial stair and raised courtyard were constructed In combination, the overall complexity of the *Ek-pay* residential plan was enhanced by these construction efforts. Within the *Familia* Group a new building platform, Structure F14, was constructed on the southern side of the plazuela (F14-1st, F14-2nd). This relatively large, but unelaborate structure increased the amount of residential living space within this group. In contrast to the rest of the peripheral and site core residential groups which were tested, all of which showed evidence for early Maxik phase (675-750 A.D.) construction, the *Danta* Group was built entirely within the late Maxik phase (750-875 A.D.) Both Structures D10 and D11 exhibited living platforms of restricted size. Structure D10, with its small exterior terrace and possible interior bench, displayed a slightly more complex, and elaborate residential plan than Structure D11.

The limited nature of the late Maxik phase (750-875 A.D.) residential building activities in the periphery indicates that all of the raw materials for construction could have been procured with minimal effort within the immediate vicinity of the site. With regard to construction quality, no evidence exists to suggest that any of the peripheral structures were surmounted by more than wattle-and-daub or pole-and-thatch superstructures. Well-dressed cut-stones continued to be employed in stair risers and retaining walls. However, in contrast to Structure B8 in the site core, all of these peripheral building efforts utilised poor quality dirt and dry-stone core fill. Plaster surfaces were poorly preserved, although indications are that quality plaster continued to be employed during this phase.

Architecture Data: Non-Residential

Non-residential construction during the late Maxik phase (750-875 A.D.) was limited to the *Bac-ha* courtyard That the Structure A1 shrine was not refurbished at this time implies that the Zubin residential corporate group was declining in strength. Specifically, it suggests that the principal Zubin family was unable to continue the ritual practices it had so successfully employed to both forge and maintain its large residential corporate group in the preceding early Maxik phase (675-750 A D) That Structure B6 was reconstructed implies, however, that some ritual activity was undertaken at the site during this phase. This special function structure was modified through a series of structural additions and embellishments (B6-2nd and B6-1st). The two earlier benches

were elevated at this time, and a central bench was added. The interior floor surface was also raised. These alterations likely coincided with the raising of the double-faced masonry walls. Indications are that the upper walls were pole-and-thatch or wattle-and-daub. The addition of an axial stair produced a doorway sill, and a small step down into the building proper. These features added to the complexity of the already extant architectural plan. In conjunction with these building activities, the associated *Bac-ha* courtyard was also resurfaced.

Considering the small size of this building, the quality of construction is comparatively superior to the majority of architecture at Zubin. The well-dressed cut-stones and plastered surfaces were comparable to those excavated within the periphery. However, the use of quality mortar fill, also found in Structure B8, suggests more effort was invested in site core constructions in comparison to those in the periphery. In the case of Structure B6 non-residential architecture, the continued construction of double-faced masonry walls differentiates this building from all of the contemporaneous residential constructions, both within the site core and periphery. The small-scale of the refurbishments imply that local raw materials were probably employed throughout.

Coeval, non-residential construction within the Zubin site core consisted of the re-construction of a stair between the *Ac* and *Bac-ha* courtyards. The associated *Bac-ha* courtyard was also resurfaced at this time. Although this addition may have added to the overall complexity of the site plan, the quality of this addition was quite poor. Specifically, the cut-stones employed were only roughly dressed, and the fill consisted of dry-stone core and dirt. Preservation of the architecture was poor, but indications are that plaster was employed to provide a more aesthetically pleasing final product. The limited nature of all of the aforementioned construction efforts suggests that local raw materials were likely utilised during this construction activity.

Finally, within the periphery, it is also plausible that an eastern shrine structure (Structure F15) was constructed in the *Familia* plazuela at this time. This may have served as a family shrine for this growing residential group. Unfortunately, extensive looting of this structure ruled out excavation to confirm this interpretation. However, if this postulation is accurate, the presence of this family shrine may attest to a decline in the power of the Zubin residential corporate group, as veneration of ancestors at this household level may have deterred from the integrative power of the Structure A1 community shrine (e g McAnany 1995).

Labour Data

The limited nature of the residential elaborations undertaken during the late Maxik phase (750-875 A.D.), both within the site core and periphery, suggests that familial reciprocal labour was employed for residential construction and elaboration. Similar familial reciprocal, or at best familial contractual labour was likely utilised to produce the limited modifications to the B6 ritual structure, and any associated ritual activity conducted at the site. Given the implied weakness of the residential corporate group at this time, a combination of familial reciprocal and/or familial contractual labour likely produced the bulk of basic resources. Little evidence exists for the production of non-basic resources, however, such activities were again likely undertaken through familial reciprocal and/or familial contractual labour.

Summary: Microregional Social Organisation in the late Facet Maxik Phase

The Late Classic period (600-875 A.D.) at Cahal Pech has received little publication to date. Early reports did argue for a dramatic decrease in constructional activity during the late Maxik phase (750-875 A.D.). In fact, Awe and Campbell (1988:42) postulated that the site was abandoned as early as 800 A.D. We do have data, however, which suggests that the Cahal Pech residential corporate group remained active until near the end of the late Maxik phase (750-875 A.D.). This is evidenced by a "tomb" which was discovered in 1969. This "tomb", excavated by then Commissioner of Archaeology Peter Schmidt, has recently been dated by ceramic comparisons to the 830-889 A.D. time span (Reents-Budet 1994.349). According to Reents-Budet, this was the tomb of an *ahau*. Not only did this interment exhibit an elaborate grave chamber, and preferential burial location in Structure B-1 (see Awe 1992:58-59; see Figure 3.4), it also contained a number of artefacts associated with rulership (Reents-Budet 1994:349; see also Schele and Miller 1986:70-71). These included components from a "royal belt" (i.e., jadeite and shell mosaic mask, three jadeite plaques), a jadeite bar pendant, two jadeite earflares, and nine ceramic vessels (Reents-Budet 1994.349, Figure 6.32). The presence of this individual, and the associated accoutrements, suggests that the power-sharing strategy that the Cahal Pech residential corporate group had adopted in the preceding early Maxik phase (675-750 A D) had sufficed to keep it *relatively* strong until near the end of the Classic period (675-875 A.D.). It also provides good evidence

for continued ranked status differences, the persistence of a ruling caste, and the presence of an upper stratum . Similarly, it is likely that the Cahal Pech faction continued to be operative, although it is again clear that the Cahal Pech site core remained the *primary* focus for the ritual/administrative activities associated with faction consolidation.

This is confirmed by the excavations at Zubin, where few indications of ritual or administrative endeavours where recognised for this time span. In fact, after its brief period of glory during the preceding early Maxik phase (675-750 A D), the Zubin residential corporate group appears to have settled into a rather mundane existence. Although there is evidence to suggest that the residential corporate group saw a slight increase in size, as indicated by the expanding number of peripheral structures, there is nothing to suggest that the inhabitants of the Zubin site core benefited from this population growth. In actuality, the principal family appears to have weakened somewhat in comparison to the rest of the residential corporate group members. This is suggested by the fact that although structural refurbishments were undertaken within the site core's secondary residence (Structure B8) and ancillary ritual structure (Structure B6), as well as within the immediate periphery, no modifications were made to the primary residence (Structure A4), the focal eastern ancestor shrine (Structure A1), or the main administrative building (Structure A3).

The similarity of residences within both the site core and periphery also suggests that ranked status differences between the various residential corporate group members had declined substantially from the early Maxik phase (750-875 A.D). Concomitantly, the lack of evidence for the conduct of ritual activity in association with the eastern ancestor shrine (Structure A4), considered in light of the fact that some of the peripheral groups appear to have been creating their own ancestor shrines at this time (e.g. Structures F15), implies that the Zubin site core was no longer the principal focus for residential corporate group activities. Rather, the data suggests that such activities were now regularly carried out at the household level. Clearly, the principal Zubin family was no longer able to portray its ancestors as the only legitimate connection to the Zubin locus. The rather tentative hold over the land, which they had acquired during the period of microregional power-sharing, appears to have disintegrated. In sum, this data indicates that the Zubin residential corporate group had become a rather informal social unit at this point in time.

It is possible that, after the brief surge in prominence that was promoted by the early Maxik phase (675-750 A D) power-sharing strategy, the Zubin residential corporate group may have found itself waning in the wake of an effective period of power reconsolidation on the part of the Cahal Pech residential corporate group. Zubin's importance as a node in the factional alliance may have been downplayed by the powers to be as they once again refocused all attention on the Cahal Pech site core. If so, this would have dramatically curtailed the actions of the burgeoning residential corporate group at Zubin, and hindered its upward mobility within the faction This incapacity is most dramatically expressed in the failure to carry out ritual activities in association with the eastern ancestor shrine, the ineffectual program of residential and administrative structural refurbishments, and inability to procure status markers.

In the end, the Zubin residential corporate group appears to have been unable to acquire the materials or carry out the actions required for continued status embellishment. Thus, it would appear that Zubin's position as the abode of a progressive middle stratum social group was rather short lived, and by the late Maxik phase (750-875 A.D.) it had retreated into a social standing more indicative of a lower stratum social unit. Whether other middle stratum members, such as the inhabitants of Zinic (see above), also felt the pinch of Cahal Pech power consolidation remains to be determined. It may be that, because of Zinic's ruling caste affiliation, they were more favourably positioned within the power structure. Thus, they may have persisted as ruling caste, middle stratum members. In the end, Zubin's lower caste affiliation may have ruled out their continued participation within this social stratum, and they thus descended into mediocrity.

In conclusion, the late Maxik Phase (750-875 A D.) seems to have been a period of reconsolidation on the part of the Cahal Pech residential corporate group. Following the previous period of power-sharing (i.e., the early Maxik phase [675-750 A.D]), in which the social landscape appears to have been quite diverse, social organisation during the late Maxik phase (750-875 A D.) seems to have been comprised of a number of more discrete social units. The most glaring change resulting from this reconsolidation of power, and re-emphasis on the Cahal Pech site core, appears to have been the constricting of the newly formed middle stratum. In comparison to the preceding early Maxik phase (675-750 A D), the middle stratum was now a much smaller, more select societal division. Although it is likely that some wealthy or prosperous lower caste

groups may have retained this social standing, others, like Zubin, appear to have been unable to maintain their social position

In the end, ranked statuses, corporate groups, factions, castes, and strata continued to be present during the late Maxik phase (750-875 A.D). However, by the end of this period a dramatic societal upheaval appears to have taken place (i.e., the infamous collapse; see Culbert 1973). The exact cause of this decline remains open for investigation, but it is clear that a multicausal explanation will provide the most likely answer. It is not the purpose of this study to offer such an explication. Rather, I simply wish to stress that the changing nature of the social landscape must be studied in more detail, as it clearly holds some tangible clues as to why Late Classic (675-875 A.D.) society succumbed. Specifically, the rather tentative nature of Late Classic (675-875 A.D.) social organisation, and the continual readjustments and accommodations that had to be made on the microregional scale (as discussed herein), may have had deleterious effects which were felt on a much broader scale.

CONCLUSIONS

Although this analysis is not as thorough as it could be, it still provides some valuable insights into microregional social organisation. With the addition of data from the other excavated groups within the Cahal Pech microregion, it is hoped that future comparative analyses will allow the development of an even more detailed model. Notwithstanding this, I hope that this preliminary assessment has demonstrated the worth of the interpretative framework that I have presented herein. Through the use of the bundled continua of power, a multifaceted, diachronic analysis has been produced. This analysis has facilitated the recognition of the various social units (i.e., ranked statuses, corporate groups, factions, strata, and castes) which likely combined to form ancient Maya society.

Not only has the analysis allowed for the recognition of these social groups, it has also permitted the formulation of a developmental model for ancient Maya social organization within the Cahal Pech microregion. This model suggests that ranked statuses and residential corporate groups were present as early as the Cunil phase (1200-900 B.C.). With the onset of the early Kanluk phase (900-650 B.C.) one can isolate the initial stages of faction building. During the subsequent late Kanluk phase (650-350 B.C.) the factional alliance appears to have solidified to some degree, and the

formation of two distinct social strata may have started. Beginning with the Xakal phase (350 B.C.-350 A.D.) these two distinct social strata are clearly recognisable. By the end of the Ahcabnal phase (350-600 A.D.) the differences between these social strata appear to have reached the point where distinct ruling and lower castes had formed. These caste differences were likely exacerbated during the following Xnipek phase (600-675 A.D). Indications are, however, that these differences were difficult to maintain, and by the early Maxik phase (675-750 A.D.) a power-sharing strategy may have been adopted by the ruling caste in order to appease prominent members of the factional alliance. This power-sharing appears to have created a more fluid social landscape, one which probably included a heterogeneous middle stratum composed of lesser ranking members of the ruling caste and some of the more important members of the lower caste. Finally, during the late Maxik phase (750-875 A.D.), a period of reconsolidation appears to have effectively shrunk the ranks of this new middle stratum.

The developmental model has also underscored the importance of excavation data, particularly that derived from the middle level of settlement. The Zubin analysis has shown that this site changed dramatically over time. In fact, it has been demonstrated that Zubin's present architectural configuration can only be considered indicative of early Maxik phase (675-750 A.D.) social organization. Prior to this the site had a long history as a ritual locus. Eventually, administrative tasks relating to faction building and consolidation were also carried out at the site. However, it was only late in its history that the site saw the residential occupation most people would ascribe to it upon examination of the site plan. This test case more than adequately points out the weaknesses of those endeavours which attempt to characterise social organisation in a synchronic manner, armed with overarching models, site plans, and limited excavation data. It is only through detailed, diachronic analyses, such as the one presented herein, that a more accurate appreciation of ancient Maya social organisation will be developed.

CHAPTER 7

CONCLUSIONS

This thesis began as a relatively simple exercise: produce a data base from a small "minor centre" and assess the role that the inhabitants of such sites played within ancient Maya social organisation. From the outset it became apparent that, although Mayanists were in general agreement as to what sites were not minor centres, few had explicitly tackled the problem of what actually constitutes a site of this type. As I began my explorations I found that a large part of the problem concerned the fact that only a handful of minor centres had received archaeological attention. The general practice had been to ascribe such sites a particular function or role based on what was known about other portions of the settlement continuum. Within such endeavours minor centre site plans and spatial location were often the only factors which were considered during the interpretative process. Evidently, a more detailed assessment of what comprised a minor centre was required before an understanding of these sites could be produced.

In starting with the basic data that others had employed, namely site plans and spatial locations, it became quite clear that a vast continuum of settlement existed. In fact, it was readily apparent that minor centres did not constitute a monothetic site type. Rather, there was more variability within this settlement level than any other. This typological problem indicated that the requisite first step was going to be the formulation of a typology that could accommodate this variability, yet still foster distinctions between sites of this type and others of lesser and greater complexity. The trick lay in dividing the settlement continuum in such a way that it promoted analysis, yet did not force the inherent variability into strict types. This was achieved by employing the relatively accommodating upper, middle, and lower level settlement typology. By recognising that each site may exhibit a different developmental trajectory, and hence two similar sites could have been produced through a very different set of social circumstances, it still became possible to classify "minor centres", and sites of similar size and complexity, as middle level settlement units This provided a broad settlement *level* for exploration, rather than a distinct site *type* Until we learn more about the nature of the settlement variability, I think this construct will provide a satisfactory solution to the typological problem.

Having established that the highly variable middle level of settlement would be the focus of the thesis, the next step was to assess the models that had been employed to characterise such sites. Unfortunately, a review of the literature indicated that the variability in the middle level of settlement remained little understood. In fact, this variability had not been addressed by any of the interpretative schemes It became obvious that one of the primary reasons that such contrasting interpretative frameworks as the "egalitarian", "two-class", and "complex society" models could all be on the table at the same time was because of the limited understanding of the settlement data base, and especially the lack of knowledge concerning the highly variable middle settlement level. This fact underscored the importance of generating a more comprehensive understanding of this settlement variability.

As alluded to above, the main problem lay in the fact that the competing models failed to adequately accommodate the presence of a highly variable middle level of settlement. This inherent weakness ruled out the adoption of any of the current models for ancient Maya social organisation (e.g. egalitarian, two-class, feudal, segmentary state, multiclass). Specifically, the variability within this settlement level meant that numerous roles were potentially played out by the inhabitants of minor centres. Thus, simplistic overarching models that assigned an identical function to all sites of this type were potentially masking important social variation. Similarly, with few exceptions (see Freidel's 1981 pilgrimage fair model; McAnany's 1983 heterogeneous household model, and 1995 multifamily residential compound model), all of these models suffered from the lack of a diachronic perspective. None allowed for the fact that the functions of each site, and the roles of its inhabitants, could change drastically over time. For the most part, they promoted static models based on Old and New World ethnographic and/or ethnohistoric analogies. None of these were entirely satisfactory. For this reason a simple answer to the question, "what role did the inhabitants of such sites play within ancient Maya social organisation?", was not going to be as forthcoming as I originally thought.

It was clear that, rather than simply assessing the current models for best fit, one would have to start from scratch and produce a more realistic interpretative framework From the outset it was felt that a more pragmatic approach might be the best position to embrace. The one adopted in this thesis is grounded in social theory, and is best considered a form of mutualist social archaeology. This framework does not force the data to conform to the expectations of an overarching framework, but rather stresses the

recognition of a number of fundamental social units (ranked statuses, corporate groups, factions, strata, and castes) which are potentially active in *any* social setting These social groups thus guide the analysis, rather than govern its outcome. It is additionally advantageous that these social units may be present in a variety of different combinations. Thus, there was a degree of requisite flexibility built into the analysis, unlike the predetermining nature of the overarching models, which often lead to self-fulfilling conclusions.

Through the use of a series of bundled continua, a diachronic analysis can be implemented to isolate the presence of the various social groups, and thus produce a realistic, developmental model for ancient Maya social organisation. It is significant that this framework has the potential to reconcile many of the conflicting aspects inherent within contrasting models for ancient Maya society. Specifically, through the use of explicit definitions, and a diachronic approach, it has been demonstrated that many of the social features that have been presented in competing models (e.g. the two-class [really castes], vs. multiclass [really strata] debate) can co-exist within the same social milieu. This defuses a great deal of the controversy which has plagued the study of ancient Maya social organisation to date.

The interpretative framework presented herein was employed in a diachronic analysis of the Cahal Pech microregion. The data base from the minor centre of Zubin formed the primary comparative sample. This analysis pointed towards a complex developmental sequence for the microregion. The various social units (ranked statuses, corporate groups, factions, strata, and castes) came into existence at different times, and their presence was felt in a number of different ways. It is this complexity that is reflected in the overall settlement variability. The diachronic analysis was also effective in that it readily highlighted the changing nature of the Zubin minor centre. This site started as a ritual locus for faction-building activities. At a later point in time an administrative function was grafted on to this ritual role, as the site became more involved in faction consolidation Still later, during a period of microregional power-sharing, Zubin was first occupied by a residential corporate group which appears to have been part of a burgeoning middle stratum. Following this brief moment of glory the inhabitants of the site appear to have settled into a rather mundane, lower stratum existence. Notwithstanding the preliminary nature of the current analysis, I still think that it provides some accurate insights into social organisation on this microregional level. In the future a more comprehensive analysis of the microregion will be

conducted, employing all of the available data from the various settlement units within the vicinity of Cahal Pech. This will permit the formulation of a more detailed developmental model for micoregional social organisation. Hopefully, further work on both the regional and macroregional scale will allow for broader societal models to be constructed.

In sum, it is my contention that minor centres and other middle level settlement units provide one of the best "laboratories" for exploring the question of social organisation. The variability inherent within this settlement level attests to important divergences in site development, which in turn implies that a complex network of social transactions were carried out by the inhabitants of such sites. The Zubin example offers only one possible developmental trajectory. Nevertheless, Zubin's developmental model does provide valuable insights into the changing character of microregional social organisation. Such insights are rarely generated by the overarching interpretative schemes so prevalent in Maya archaeology. Similarly, it has been underscored that those analyses which rely on site plans cannot hope to accurately characterise long-term social development. In the case of Zubin, a site plan dependent model could only hope to provide a basic understanding of a ca. 75-100 year period of site occupation. Such frameworks hinder, rather than promote a detailed understanding of ancient Maya social organisation.

Due to the relatively new analytical position adopted by this thesis, a number of speculative ideas remain in the final product. However, it is hoped that these are outnumbered by the provocative issues that have been raised. As Mayanists we must begin to approach the question of social organisation in a far more sophisticated manner if we are going to succeed in painting an accurate picture of this society. In methodological terms, we must strive to produce a more representative data base, one which includes data from the highly variable middle settlement level. It is through the formulation of a more thorough understanding of the social factors behind this variability that a more circumstantial knowledge of ancient Maya social organisation will be forthcoming.

APPENDIX I:

SURVEY, EXCAVATION, RECORDING, AND CLASSIFICATION METHODS

SURVEY METHODS

The Zubin survey was conducted by Shawn M Brisbine and Cameron Griffith using an optical theodolite and standard stadia rod. Stadia tacheometry was employed to calculate distances. As outlined in Figure I.1, grouped architectural features were assigned a structure designation consisting of a group letter and a sequential number (e.g. STR. A1, B8, D11). Solitary structures were simply assigned a number in the sequential list (STR. 15). Non-architectural features were given an operation number (e g. Op. 100). Completed maps were produced by Brisbine using *Autocad*. Admittedly, a methodical surface reconnaissance was never conducted in the Zubin periphery. This reflects a number of uncontrollable circumstances, the majority of which originated during operations within the Cahal Pech site core and its immediate periphery. These have been outlined in detail by Awe and Brisbine (1993), and are only summarised here. Given Cahal Pech's proximity to San Ignacio town, survey datums often went missing, only to be found in the hands of young children at a later date. This meant that re-surveying often had to be conducted, curtailing the number of new shots that could be made on a daily basis. The continual growth of San Ignacio town also hampered the survey crew, as they often had to change their locus of operations at a minute's notice in order to map settlement clusters threatened by bulldozers. The necessity for such salvage operations was a constant hindrance, and as a result it became impossible to implement a systematic survey. In the end a transect ca. 1 km wide and 2.5 km long, stretching between the Cahal Pech and Zubin site cores, was eventually produced, but this was by means of "patchwork" rather than through orderly procedures.

In conjunction with the Cahal Pech survey problems, the small size of the Zubin crews also ruled out intensive reconnaissance and survey at that locale. Concomitantly, with reference to the goals of the Zubin operations, namely the need to produce a multifaceted, temporally representative data base from the focal architectural assemblage, excavations had to take priority over reconnaissance and survey. To put reconnaissance and survey on an equal footing with excavations in the site core would have greatly curtailed the amount of excavations which could be completed by the small crews, and produced a study analogous to those being criticised. In the end, the survey reflects a concerted, but unsystematic effort to produce a map reflective of the majority of prominent architectural features. It does, therefore, suffice to illustrate the overall

B.V.A.R. PROJECT DESIGNATION GUIDE

SITE

Group A (etc) (two or more associated Structures)		Group B (etc)	Non-Group Structures (solitary structure)	Non-Group Operations (non-structure investigations)
Structures	Plazas	Structures	Structure	Operation
A1, A2, A3	Plaza	B4, B5, B6	7, 8, 9	100, 101
etc	A	etc	etc	etc

Note* Structures are labelled in consecutive order for the entire site, beginning with 1. Operations are numbered in consecutive order beginning with 100.

Units	Units	Units	Units	Units
A1-1	AP-1	B4-1	7-1	100-1
A1-2	AP-2	B4-2	7-2	100-2
A1-3	AP-3	B4-3	7-3	100-3

Note* Prefix changes based on structure (eg. A1-1, A2-1, A3-1, A2-2, A2-3, A3-2, B5-1, B5-2 etc).

Burials	Burials	Burials	Burials	Burials
A1-B/1	AP-B/1	B4-B/1	7-B/1	100-B/1
A1-B/2	AP-B/2	B4-B/2	7-B/2	100-B/2
A1-B/3	AP-B/3	B4-B/3	7-B/3	100-B/3

Note* Prefix changes based on structure (eg. A1-B/1, A2-B/1, A3-B/1, A2-B/2 etc.).

Features	Features	Features	Features	Features
A1-F/1	AP-F/1	B4-F/1	7-F/1	100-F/1
A1-F/2	AP-F/2	B4-F/2	7-F/2	100-F/2
A1-F/3	AP-F/3	B4-F/3	7-F/2	100-F/3

Note* Prefix changes based on structure (eg. A2-F/1, A3-F/1, B5-F/1, B6-F/1, A2-F/2 etc.).

Special Finds	Special Finds	Special Finds	Special Finds	Special Finds
A1-SF/1	AP-SF/1	B4-SF/1	7-SF/1	100-SF/1
A1-SF/2	AP-SF/2	B4-SF/2	7-SF/2	100-SF/2
A1-SF/3	AP-SF/3	B4-SF/3	7-SF/3	100-SF/3

Note* Prefix changes based on structure (eg. A2-SF/1, B5-SF/1, A2-SF/2, B5-SF/2 etc.).

Figure I 1. The Zubin designation guide.

density and complexity of the Zubin site core and its peripheral settlement.

EXCAVATION METHODS

The nature of the Zubin investigations similarly dictated that site core excavations would take precedence over peripheral operations. To have done otherwise would have again contradicted the goals of the project, The size of the crew was again a prime determining factor in the making of this decision. All excavations were conducted using trowels and geologists hand-picks. Smaller wooden tools and dental instruments were taken up to complete more intricate excavations. All deposits were screened through 1/4" mesh in order to provide consistent artefact samples for analysis. Soil samples were obtained from all floor levels and any other deposits which were deemed fitting.

Within the Zubin site core a combination of horizontal and vertical excavations was employed from the outset of operations. These contrasting methods of data acquisition were applied in a complementary fashion to initially exposing large sections of terminal architecture, and subsequently trench via smaller units to gather data from the earlier occupation levels. A combination of these methods was considered the most fruitful approach for acquiring a temporally sensitive knowledge of architectural and material culture remains, while still promoting an understanding of terminal architectural forms and associated artefact patterning.

RECORDING AND CLASSIFICATION METHODS

A number of horizontal datums were surveyed in for each unit to facilitate mapping of finds. Triangulation was the primary method of horizontal recording. Field maps where completed in 1:20 scale. One horizontal datum for each unit was also designated the vertical datum, which was subsequently provided with an Above Sea Level (ASL) elevation by the surveyor Vertical control over artefact distributions was maintained by excavating in levels with either natural or cultural integrity. Where finer horizontal or vertical control was required levels were subdivided into smaller spatial entities For example, Level 2, a fall deposit in a unit with a platform and retaining wall might be divided into Level 2a, in front of the wall, and Level 2b, materials resting on top of the platform This method is profitable in that it is easily recognised that both

levels are "fall deposits", yet the affix indicates that these deposits were spatially separable. One need not know if these deposits are different at the outset, and in fact a deposit such as "fall" is often quite homogenous due to the processes involved in its formation. Nonetheless, laboratory analysis may indicate that the field separation was of relevance. The ease with which the separation can be made, and the connection between the two deposits retained, makes this a much more malleable and understandable system than the cumbersome "lot" method (e.g. W. Coe and Haviland 1982:43-44). In fact, in the majority of architectural investigations Level 2 will always be a fall deposit, thus this recording method also provides information far quicker than the lot system.

Nomenclature for superimposed structures follows that for the Tikal Project (W. Coe and Haviland 1982:47-48). For example, B6-1st would overlay B6-2nd, and so on from the terminal architecture down. Burials where assigned a designation combining the structure number from which they were recovered, a "B" for burial, and a sequential number for that specific structure (e.g. A1-B/7, the seventh burial recovered from Structure A1). Other special deposits, such as caches, were designated in the same manner as burials, with the exception that an "F" for feature was substituted (e.g. A1-F/7, the seventh feature discovered in Structure A1). All formal artefacts were given a "Special Finds Number", which followed the method described for burial and feature designations, with the substitution of "SF" for special find (e.g. A1-SF/7, the seventh special find found in Structure A1). Level Records, Burial Records, and Feature Records, all developed by the author, were used to record the primary excavation data (see Figures I.2, I.3, and I.4). Bound notebooks were also employed to provide excavators with a more malleable device for recording information and ideas. Catalogue cards, also developed by the author, were included with all finds bags (see Figure I.5). These contained all pertinent excavation information

CLASSIFICATION SCHEME

Separable deposits and contexts (e g. fall vs. construction fill with rubble) were designated following a classification scheme originally outlined by Garber (1986), and subsequently modified by the author (Iannone 1992; see Appendix II). Size classifications for sedimentary clasts conform to the Wentworth scale. Architectural descriptions follow Loten and Pendergast's (1984) *Lexicon*. Grave classifications

Figure I.2. Scaled version of the Zubin "Level Record".

1

B.V.A.R. PROJECT LEVEL RECORD

USE PEN

Site_____ Date_____

Supervisor_____ Excavators_____

Group/Operation_____

Structure_____ Other_____

Unit_____ Unit size_____

Level_____ Level is cultural/natural_____ arbitrary_____
(specify thickness)

Below Unit Datum (B.U.D.)
Measurements - START

NW___ NE___

C___

SW___ SE___

Level Thickness

NW___
NE___
C ___
SW___
SE___

Below Unit Datum (B.U.D.)
Measurements - FINISH

NW___ NE___

C___

SW___ SE___

(Circle Unit Datum)

Note* If level does not cover entire unit map out and fully label area of excavation on the above plans prior to and after excavation.

UNIT DATUM is in NW, NE, Sw, SE corner , and is_____cm
below/above SITE DATUM.

Level is a Floor_____ Other_____(explain)
If Floor:
-thickness of floor surface (avg)_____ or reflooring surfaces____
-degree of preservation_____
-burning present___ absent___
-thickness of ballast (avg)_____ absent___
-thickness of core (avg)_____ absent___
-total thickness of floor level_____

Description of Matrix: (eg. dry fill, mortar, plaster, masonary, aggregate, compactness, clast percentages - pebbles (0.4-6.4 cm), cobbles (6.4-25.6cm), boulders (>25.6cm).

USE BACK OF PAGE IF NECESSARY

2

level record continued...

Matrix sample taken yes___ no___
Photographs:_____
(give #s)_____
C14 samples (list)_____
_____
Associated Features:_____
(give #s)_____
Associated Burials:_____
(give #s)_____

Comments on artifacts:

Associated Special Finds:

Special Finds Number	Material	Description	Location in Level (quadrant)	Depth (B.U.D)

use back of page if required

Excavators comments/observations:

use back of page if required

1

B.V.A.R. PROJECT FEATURE RECORD

USE PEN

Site_____ Date_____

Supervisor_____ Excavators_____

Group/Operation_____

Structure_____ Other_____

Unit_____ Unit size_____

Feature number_____ Feature type_____

Depth Below Unit Datum (B.U.D.) top____
Depth Below Unit Datum (B.U.D.) bottom____
Unit Datum is in the NW, NE, SW, SE corner and is____ below/above site datum
(circle)

Photographs (list)_____

Matrix Sample Taken yes___ no___
C14 samples Taken (list)_____

Description:

use back of page if required

2

feature record continued...

Stratification: Feature associated with level_____
Reasons:

Comments on artifacts:

Associated Special Finds:

Special Finds Number	Material	Description	Location in feature	Depth (B.U.D)

use back of page if required

Excavators comments/observations:

use back of page if required

Figure I.3. Scaled version of the Zubin "Feature Record".

Figure I 4. Scaled version of the Zubin "Burial Record".

1

B.V.A.R. PROJECT BURIAL RECORD

USE PEN

Site_____ Date_____

Supervisor_____ Excavators_____

Group/Operation_____

Structure_____ Other_____

Unit_____ Unit size_____

Burial number_____ Individual___of_____(total number of individuals)

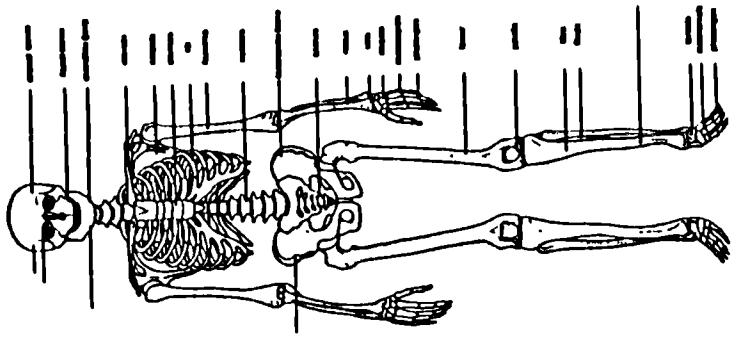
Depth Below Unit Datum (B.U.D.) top___
Depth Below Unit Datum (B.U.D.) bottom___
Unit Datum is in the NW, NE, SW, SE corner and is___ below/above site datum
(circle)

Photographs (list)_____

Matrix Sample Taken yes___ no___
C14 samples Taken (list)_____

Condition of Remains_____

BONES PRESENT
(indicate by shading)



NOTE: If more than one individual is present use a new form for each. Attach all sheets together upon completion.

2

burial record continued...

Stratification: Burial associated with level_____
Reasons:_____

Sex_____ Age_____ Interment type: primary___ secondary___
Orientation of grave_____
Grave type (Welsh 1988)_____
Head orientation_____
Position of limbs: arms_____
legs_____
Skeletal position: flexed (left side down)___ extended prone___
flexed (right side down)___ extended supine___
upright___ other_____
Associated features (list)_____

Comments on artifacts:

Associated Special Finds:

Special Finds Number	Material	Description	Location in Burial (quadrant)	Depth (B.U.D)

use back of page if required

Excavators comments/observations:

use back of page if required

B.V.A.R. PROJECT RECORDING CARD

USE PEN

Site_____ Date_____
Supervisor_____ Excavators_____
_____
Group/Operation_____ _____
Structure_____ Other_____ Unit_____
Unit size_____ Quad. if applicable NW__ NE__ SW__ SE__
Level_____ Feature_____ Burial_____
(indicate if on floor) Other_____
Level/Feature/Burial is_____(eg.surface)
Lithics__ Faunal__ Ceramic__ Human__ Matrix sample__
Special finds_____(give SF#) Other_____
Processed matrix sample__ Fraction size_____
C14 sample__ Type of C14 sample_____
Bag___of___ Other bags include_____
_____(eg. faunal, lithics)

Figure I.5. The Zubin "Recording Card".

comply with those outlined by Welsh (1988) in his definitive analysis of Lowland Maya burials Other special deposits (e g. caches) were classified following the typology previously presented by the author (Iannone 1992; see Appendix II). All faunal identifications have been made by B V.A R Project faunal analyst Norbert Stanchly (Stanchly 1993, 1994, 1995a). The lithic assemblage was classified by Tina Christensen, with some assistance by the author. Analysis of the human remains was conducted by Dr. David Glassman and Trent C. Stockton of Southwest Texas State University (Glassman and Stockton 1995), and Sonja Schwake (1995, 1996) of the B.V.A.R. project. Artefact terminology generally conforms to that utilised in the Altar de Sacrificios (Willey 1972), Barton Ramie (Willey et al. 1965), Piedras Negras (Coe 1959), Seibal (Willey 1978), and Uaxactun (Kidder 1947) reports. Ceramic classification was done by the author, with some assistance from Dr. Jaime Awe of Trent University, Dr. Joe Ball of San Diego State University, and David Cheetham of the University of British Columbia. Gifford's (1976) Barton Ramie typology was employed throughout. Dates herein generally adhere to this typology, although modifications have been made when necessary to reflect the more pertinent chronology developed by Ball and Awe (Ball and Taschek 1986; see also Awe 1992) for Buena Vista and Cahal Pech.

APPENDIX II:

CONTEXT CLASSIFICATION SCHEME

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(I) OFFERINGS

(i) Caches

(A) dedicatory

(a) monument

(1) column altar.

(2) outdoor table altar.

(3) stela.

(5) other.

(b) axially aligned caches

(6) beneath temples.

(7) beneath palaces.

(8) beneath other structures.

(9) groups of structures.

(B) non-dedicatory

(c) non-axially aligned

(d) sub-floor

(C) termination

(e) structural

(f) occupation surface

(ii) Exposed Offerings

(D) dedicatory

(E) non-dedicatory

(F) termination

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(II) GRAVES

(iii) Simple

(G) simple

(H) pit

(I) ceiling slab

(J) blocked up room

(K) burial between others

(iv) Chultun

(v) Cist

(L) haphazard cist

(M) partial cist

(N) head cist

(O) capped pit

(EN) uncapped cist

(vi) Crypt

(P) unspecified crypt

(Q) simple crypt

(R) elaborate crypt

(vii) Tomb

(S) unspecified tomb

(T) rock-cut tomb

(U) stone-lined tomb

(viii) Urn

(ix) Unclassified or unknown

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(III) HABITATION DEBRIS

(x) Domestic

(V) primary refuse

(W) secondary refuse

(X) de facto refuse

(Y) unknown

(xi) Workshop

(Z) primary refuse

(AA) secondary refuse

(AB) de facto refuse

(AC) unknown

(xii) Ceremonial

(AD) primary refuse

(AE) secondary refuse

(AF) de facto refuse

(AG) unknown

(IV) PITFILL

(xiii) Domestic

(AH) primary refuse

(AI) secondary refuse

(AJ) de facto refuse

(AK) unknown

(xiv) Workshop

(AL) primary refuse

(AM) secondary refuse

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(AN) de facto refuse

(AO) unknown

(xv) Ceremonial

(AP) primary refuse

(AQ) secondary refuse

(AR) de facto refuse

(AS) unknown

(V) CONSTRUCTION FILL WITH RUBBLE

(xvi) Domestic

(AT) primary refuse

(AU) secondary refuse

(AV) de facto refuse

(AW) unknown

(xvii) Workshop

(AX) primary refuse

(AY) secondary refuse

(AZ) de facto refuse

(BA) unknown

(xviii) Ceremonial

(BB) primary refuse

(BC) secondary refuse

(BD) de facto refuse

(BE) unknown

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(VI) CONSTRUCTION FILL WITHOUT RUBBLE

(xix) Domestic

(BF) primary refuse

(BG) secondary refuse

(BH) de facto refuse

(BI) unknown

(xx) Workshop

(BJ) primary refuse

(BK) secondary refuse

(BL) de facto refuse

(BM) unknown

(xxi) Ceremonial

(BN) primary refuse

(BO) secondary refuse

(BP) de facto refuse

(BQ) unknown

(VII) FLOOR FILL

(xxii) Domestic

(BR) primary refuse

(BS) secondary refuse

(BT) de facto refuse

(BU) unknown

(xxiii) Workshop

(BV) primary refuse

(BW) secondary refuse

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(BX) de facto refuse

(BY) unknown

(xxiv) Ceremonial

(BZ) primary refuse

(CA) secondary refuse

(CB) de facto refuse

(CC) unknown

(VIII) ON FLOOR MATERIAL

(xxv) Domestic

(CD) primary refuse

(CE) secondary refuse

(CF) de facto refuse

(CG) unknown

(xxvi) Workshop

(CH) primary refuse

(CI) secondary refuse

(CJ) de facto refuse

(CK) unknown

(xxvii) Ceremonial

(CL) primary refuse

(CM) secondary refuse

(CN) de facto refuse

(CO) unknown

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(IX) SURFACE

(xxviii) Domestic

(CP) primary refuse

(CQ) secondary refuse

(CR) de facto refuse

(CS) unknown

(xxix) Workshop

(CT) primary refuse

(CU) secondary refuse

(CV) de facto refuse

(CW) unknown

(xxx) Ceremonial

(CY) primary refuse

(CZ) secondary refuse

(DA) de facto refuse

(DB) unknown

(X) HUMUS

(xxxi) Domestic

(DC) primary refuse

(DD) secondary refuse

(DE) de facto refuse

(DF) unknown

(xxxii) Workshop

(DG) primary refuse

(DH) secondary refuse

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(DI) de facto refuse

(DJ) unknown

(xxxiii) Ceremonial

(DK) primary refuse

(DL) secondary refuse

(DM) de facto refuse

(DN) unknown

(XI) FALL

(xxxiv) Domestic

(DO) primary refuse

(DP) secondary refuse

(DQ) de facto refuse

(DR) unknown

(xxxv) Workshop

(DS) primary refuse

(DT) secondary refuse

(DU) de facto refuse

(DV) unknown

(xxxvi) Ceremonial

(DW) primary refuse

(DX) secondary refuse

(DY) de facto refuse

(DZ) unknown

CONTEXT SUBCONTEXT TYPE SUBTYPE MICROTYPE

(XII) SLUMP

(xxxvii) Domestic

(EA) primary refuse

(EB) secondary refuse

(EC) de facto refuse

(ED) unknown

(xxxviii) Workshop

(EF) primary refuse

(EG) secondary refuse

(EH) de facto refuse

(EI) unknown

(xxxix) Ceremonial

(EJ) primary refuse

(EK) secondary refuse

(EL) de facto refuse

(EM) unknown

APPENDIX III:

THE MATERIAL CULTURE OF ZUBIN

Through a series of graphs and tables, this appendix provides a general overview of the Zubin material culture assemblage. Emphasis is placed on summarising intrasite contextual and temporal artifact trends. Current research by a number of project members will eventually provide more detailed analyses of individual artefacts and artefact types. The faunal assemblage is being analysised by Norbert Stanchly (1993, 1994, 1995a). Josalyn Ferguson (1995) has provided a more complete discussion of the worked shell assemblage. David Cheetham (in progress) is presently conducting an analysis of the ceramic figurines. Lithic artifacts are currently being appraised by Tina Christensen (in progress). Patrick Killpack (1995) has completed an assessment of the groundstone spindle whorl assemblage. The analysis of the human remains has been undertaken by Dr. David Glassman and Trent C. Stockton of Southwest Texas State University (Glassman and Stockton 1995), and Sonja Schwake (1996) of the B.V.A.R. project. Schwake (1995) has also produced a more detailed study of the modified human tooth assemblage. Upon completion of the various reports mentioned above, more detailed intersite comparisons will be conducted in order to position Zubin within its broader microregional, regional, and macroregional contexts.

THE ZUBIN ARTEFACT ASSEMBLAGE: GENERAL INSIGHTS

During the Zubin excavations 701 artefacts were designated as special finds. This count does not include ceramic sherds, faunal detritus, or lithic debitage. The latter three artefact categories were the most prevalent finds during excavations, but due to ongoing analyses they will not be dealt with at this juncture. Rather, the following summaries will emphasise formal artefact types. Within these discussions artifact terminology generally conforms to that utilised in the Altar de Sacrificios (Willey 1972), Barton Ramie (Willey et al. 1965), Piedras Negras (Coe 1959), Seibal (Willey 1978), and Uaxactun (Kidder 1947) reports. Ceramic vessels were classified using Gifford's (1976) Barton Ramie typology.

In broad terms the Zubin artefact assemblage can be divided into four primary categories based on raw material (Table III.1, Figure III 1). Lithics are by far the most prominent artefact type, with 81.74% (N=573) of the artefacts falling into this category (Table III.1, Figure III.1). In comparison, only 7.85% (N=55) of the assemblage is made up of ceramics Faunal remains are similarily rare, making up 7.56% (N=53) of the

assemblage. Finally, 2 85% (N=20) of the artefact assemblage is made up of modified human remains.

Temporally, the Zubin artefact assemblage spans the Middle Formative to Late Classic time span (ca. 900 B.C.- 900 A D.). However, the majority of artefacts were recovered from deposits dating to the Late Classic, Maxik Phase (675-875 A D.; see Table III.1, Figure III.2) Artefacts from early Maxik phase (675-750 A.D.) deposits make up 47.79% (N=335) of the assemblage. Excavations within deposits dating to the late Maxik time span (750-875 A.D.) produced 26 68% (N=187) of the recovered artefacts. This trend undoubtedly reflects the fact that the majority of excavated deposits dated to this time span (ca 675-875 A.D.), although it is also indicative of the fact that this was a time of intensified occupation and construction at the site. Deposits dating to the preceding Formative and Classic period phases consistently produced smaller numbers of artefacts (ca. 10-40; see Figure III.2). This partially reflects the comparatively limited excavations within these earlier, often deeply buried strata. However, the numbers are also indicative of the restricted construction activity during this time, and by association the limited nature of site use compared to that witnessed during the later Maxik phase. It should be noted that no artefacts are attributable to the Early Classic, Ahcabnal phase (ca. 350-600 A.D.). This time span was one in which only limited refurbishing efforts were undertaken at the site (e g. reflooring), a factor which ultimately limited the deposition of artefacts.

With reference to the temporal distribution of specific raw materials, lithics, faunal, and ceramic finds were consistently recovered in small numbers from deposits dating to the Middle Formative, Late Formative, and early part of the Late Classic period (Table III.1, Figure III.3). However, there is a significant increase in the number of lithic artefacts recovered from deposits dating to the following Late Classic, Maxik phase (675-875 A.D.; Table III.1, Figure III 3). As indicated above, this undoubtedly reflects the heightened construction activity which occured at this time (i.e., there are simply more Maxik phase deposits), and the amount of excavation which was undertaken within such deposits. However, it is consequential that a concomitant increase in the deposition of ceramic and faunal artefacts does not appear to have occurred in conjunction with this expanded construction activity. Rather, the comparative densities of the latter artefact types remained relatively constant. This may partially reflect preservation in the faunal case, and the nature of the artefact type in the ceramic instance (i.e., lithics are often production tools, and are thus regularly broken and deposited in fill contexts, ceramics

are rarely production tools, and with the exception of sherds, are less likely than lithics to find their way into fill deposits). Modified human remains were scarce throughout the sequence (see Table III.1, Figure III.3), their presence limited to the late Xakal (100-350 A.D.) and early Maxik (675-875 A.D.) phases.

As one would expect, the largest excavations generally produced the most artefacts (Table III.2). The greatest numbers of artefacts were recovered during excavations in Structures A1, A4, B8, and C9 (Figure III.4). One exception to this rule was Structure A3. Extensive excavations within this structure produced few artefacts, a result attributable to the relatively "clean" fill which was employed in the various A3 construction levels. The limited artefactual content of Structure A3 might also be indicative of the administrative function of this structure (see Chapter 4). It is plausible that the inhabitants of Zubin did not feel it necessary to inter dedicatory or termination deposits during the construction of this form of architecture. The limited excavations within the other structures and operations at Zubin all produced small numbers of artefacts (Table III.2, Figure III.4).

Not only did the larger excavations produce the greatest numbers of artefacts, but also the widest range of artefact types (Table III.2, Figure III.5). With the exception of human remains, which were all recovered from excavations in Structure A1, Structures A1, A4, B8, and C9 all produced lithic, faunal, and ceramic finds. Lithics dominated the artefact assemblages in all of these contexts. Within few exceptions, excavations outside of the larger operations only produced small numbers of lithics, and some faunal and ceramic finds (Table III.2, Figure III.5).

With reference to context type, the majority of artefacts were recovered from fill and grave contexts (Table III.3, Figure III.6) However, it is important to stress that although grave contexts contained the most artefacts on a *numerical* basis, many of these were originally deposited as part of "composite" artefacts (e.g. jade necklaces). The likelihood that such "composite" artefacts were deposited in fill and related contexts is comparatively limited, and this must be taken into consideration when contemplating artefact densites on a contextual level. If one were to treat all of the "composite" artefacts recovered from grave contexts as solitary items, the numeric superiority of fill deposits with reference to artefact distribution would become clear. This is reaffirmed by the fact that considerable numbers of artefacts were recovered from fall and humus deposits. Due to their formation processes (e g. slumping, root growth, bioturbation), these latter deposits are ultimately attributable to the natural destruction of terminal,

penultimate, and sometimes earlier architectural levels. For this reason it is highly likely that the majority of artefacts recovered from such deposits were originally deposited in construction fill. This significantly increases the number of artefacts which can inferentially be assigned to this context type.

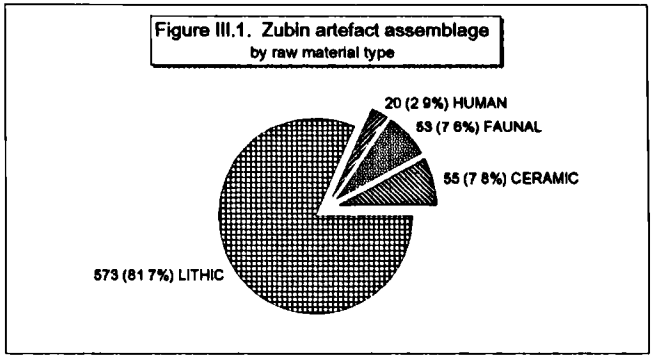
Lithics were recovered from all context types, and were especially prominent in grave, fill, fall, and humus deposits (Table III.3, Figure III.7). Similarily, faunal and ceramic finds were most consistenly found in grave and fill contexts, although they were also recovered in limited numbers from some of the other excavated strata. All human artefacts were encountered in burial contexts. More detailed data is presented in the following graphs and tables.

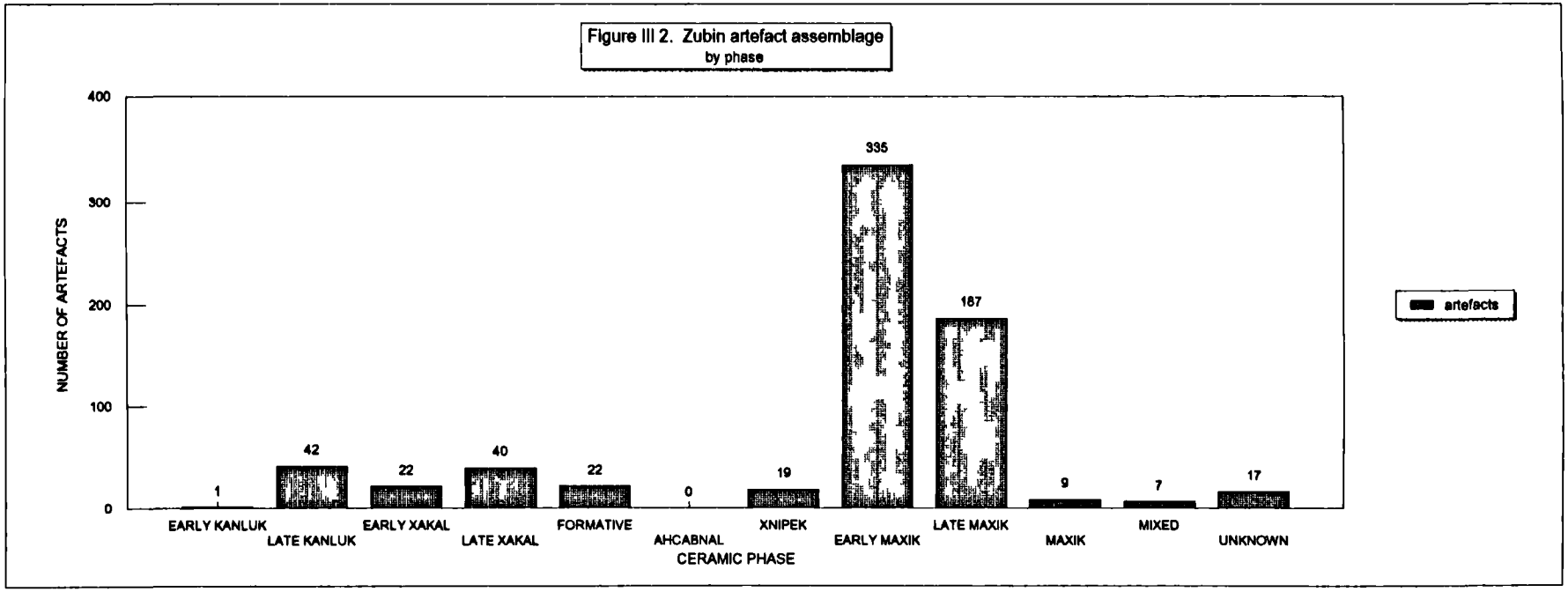
SUMMARY

In summary, this appendix identifies a number of quantitative and qualitative trends within the Zubin material culture assemblage. In conjunction with the aretfact data bases in Appendices IV and V, and the excavation data presented in Chapters 4 and 5, this data provides the reader with detailed contextual and temporal information on each artefact and artefact type. Concomitantly, this information points toward significant variability within the material culture assemblage with regard to temporality and location of deposition. Such data helps clarify the function of the Zubin architectural features, and thus faciliates the recognition of the development of residential, ritual, administrative, and other special function space (e.g. reserviors, storage, craft production). The results of the artifact analysis also suggest important intrasite differences with regard to the ability to acquire non-utilitarian artifact types and materials. In combination, this data implies significant localized distinctions in status, wealth, and power (see Chapter 6). In the future, a more extensive evaluation of the Zubin artefact assemblage, focusing on microregional, regional, and macroregional comparisons, will allow broader conclusions to be drawn concerning the status, wealth, and power of the inhabitants of Zubin, as reflected in differential access to certain material culture items, and postulated activities carried out at the site.

Table III.1. Zubin artefact assemblage by phase and raw material.

	CERAMIC	FAUNAL	HUMAN	LITHIC	TOTAL	PERCENTAGE
EARLY KANLUK	1	0	0	0	1	0.14
LATE KANLUK	12	7	0	23	42	5.99
EARLY XAKAL	1	3	0	18	22	3.14
LATE XAKAL	3	14	6	17	40	5.71
FORMATIVE	0	1	0	21	22	3 14
AHCABNAL	0	0	0	0	0	0.00
XNIPEK	1	3	0	15	19	2.71
EARLY MAXIK	22	21	14	278	335	47.79
LATE MAXIK	14	4	0	169	187	26 68
MAXIK	0	0	0	9	9	1.28
MIXED	0	0	0	7	7	1.00
UNKNOWN	1	0	0	16	17	2.43
TOTAL	55	53	20	573	701	
PERCENTAGE	7 85	7 56	2 85	81.74		100%





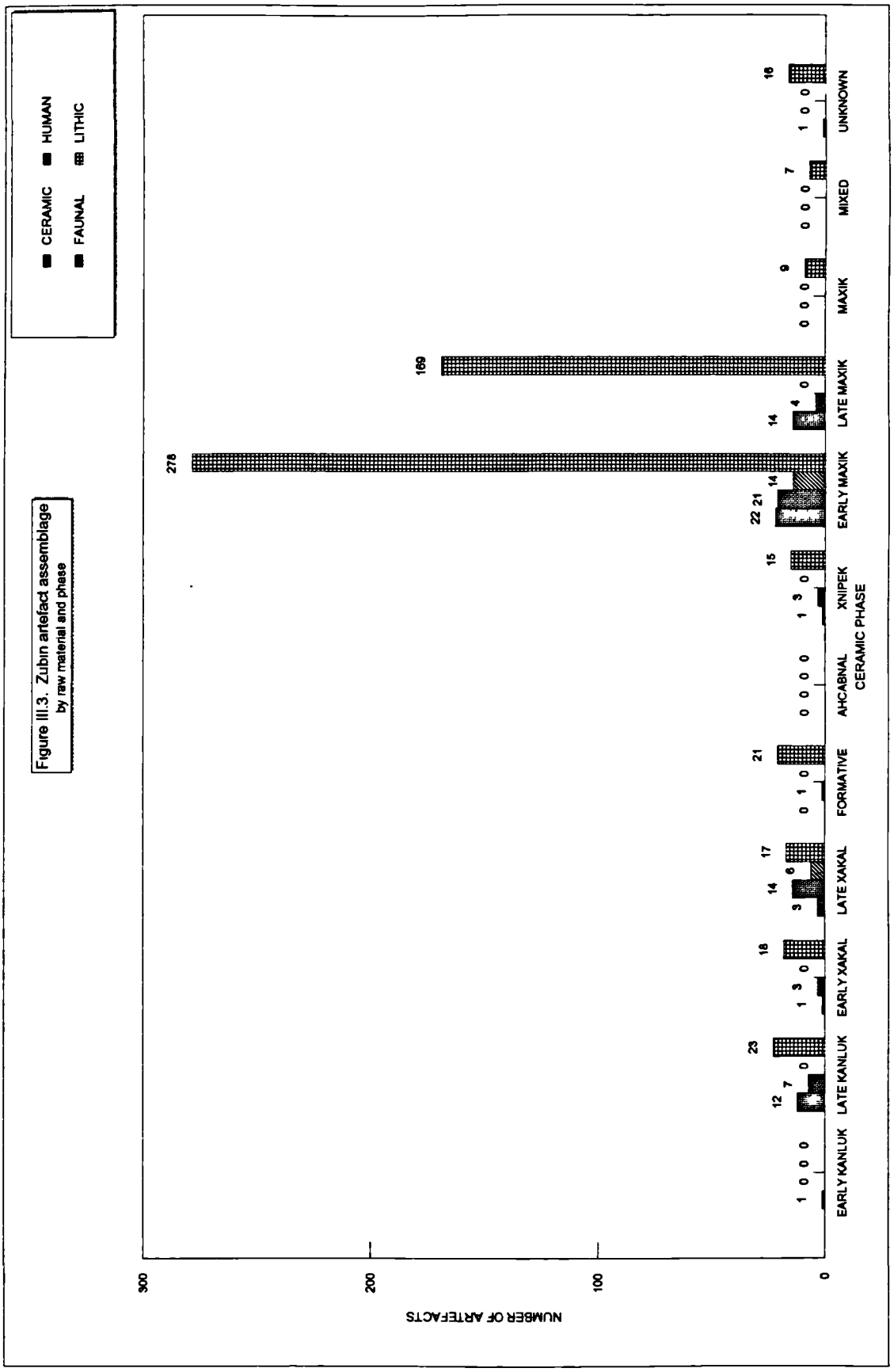
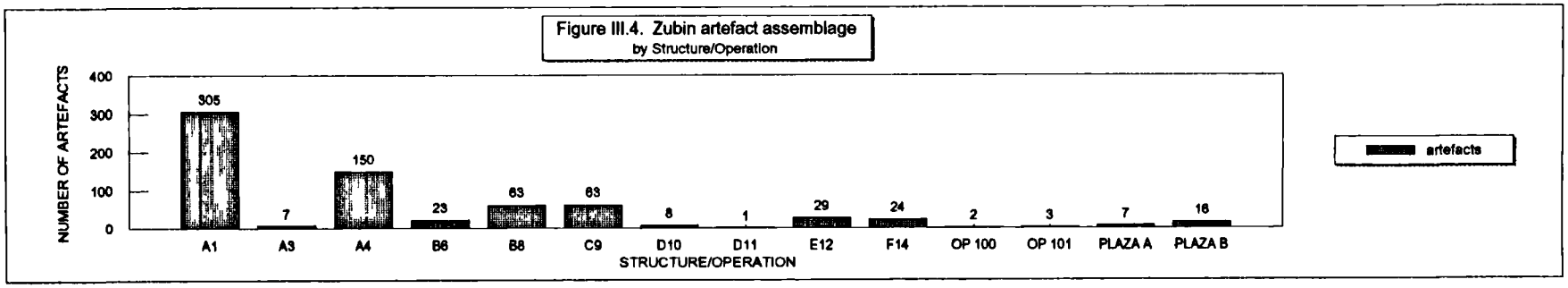


Figure III.3. Zubin artefact assemblage by raw material and phase

Table III.2. Zubin artefact assemblage by raw material and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	D11	E12	F14	OP 100	OP 101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
CERAMIC	24	0	9	1	8	10	0	0	0	1	0	0	2	0	55	7 85
FAUNAL	31	0	9	0	1	9	0	0	2	1	0	0	0	0	53	7 56
HUMAN	20	0	0	0	0	0	0	0	0	0	0	0	0	0	20	2 85
LITHIC	230	7	132	22	54	44	8	1	27	22	2	3	5	16	573	81 74
TOTAL	305	7	150	23	63	63	8	1	29	24	2	3	7	16	701	
PERCENTAGE	43 51	1 00	21 40	3 28	8 99	8 99	1 14	0 14	4 14	3 42	0 29	0 43	1 00	2 28		100%



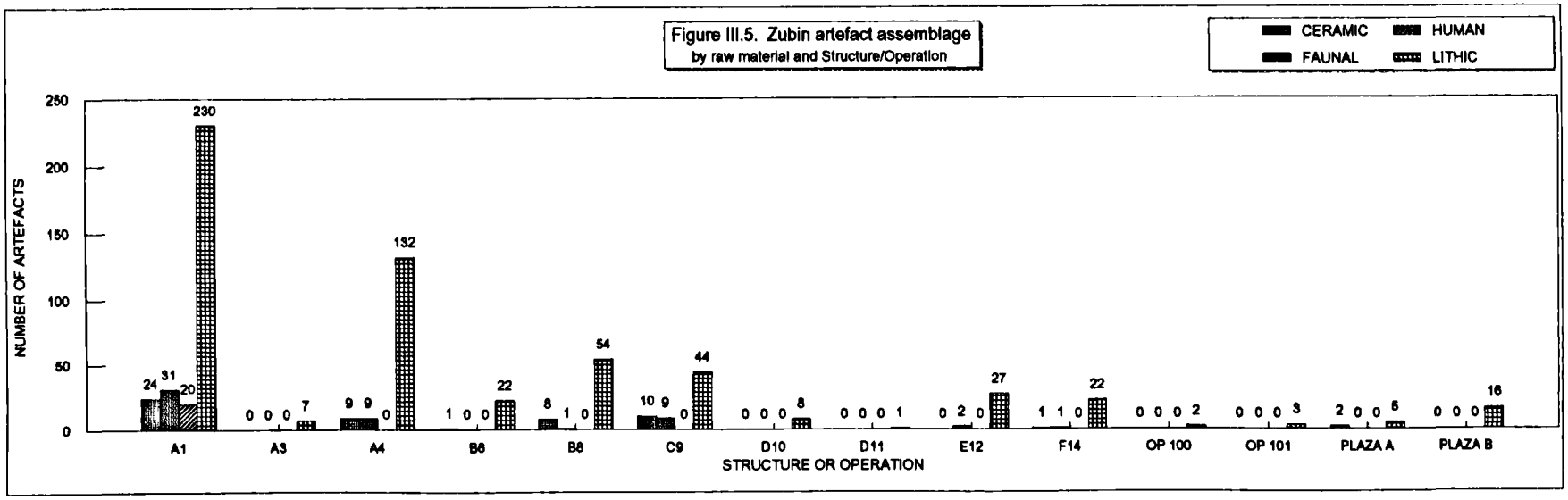
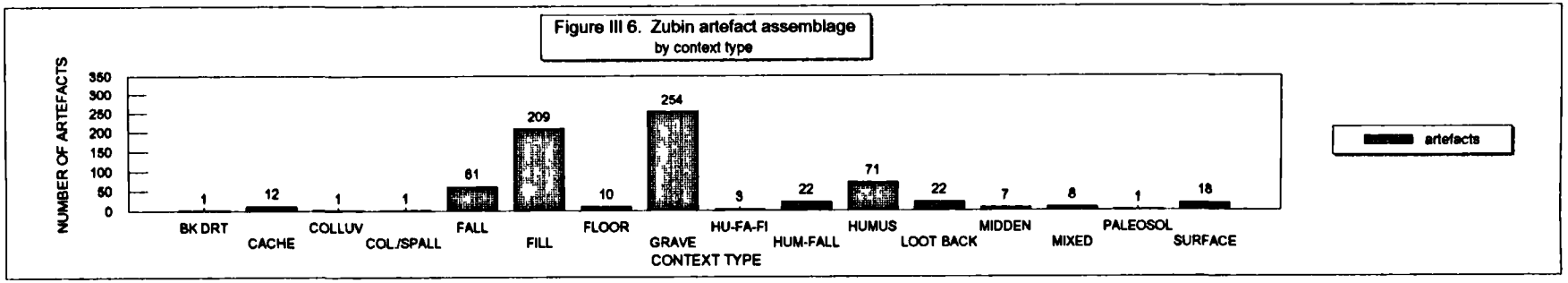


Table III.3. Zubin artefact assemblage by raw material and context type.

	BK DRT	CACHE	COLLUV	COL./SPALL	FALL	FILL	FLOOR	GRAVE	HU-FA-FI	HUM-FALL	HUMUS	LOOT-BACK	MIDDEN	MIXED	PALEOSOL	SURFACE	TOTAL	PERCENTAGE
CERAMIC	0	5	0	0	6	20	0	15	0	6	2	0	0	0	0	1	55	7 85
FAUNAL	0	0	0	0	1	14	0	32	0	0	3	1	2	0	0	0	53	7 56
HUMAN	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	20	2 85
LITHIC	1	7	1	1	54	175	10	187	3	16	66	21	5	8	1	17	573	81 74
TOTAL	1	12	1	1	61	209	10	254	3	22	71	22	7	8	1	18	701	
PERCENTAGE	0 14	1 71	0 14	0 14	8 70	29 81	1 43	36 23	0 43	3 14	10 13	3 14	1 00	1 14	0 14	2 57		100%

*NOTE BK DRT = BACKDIRT COLLUV = COLLUVIUM COL /SPALL = COLLUVIUM/WALL SPALL HU-FA-FI = HUMUS/FALL/FILL HUM-FALL = HUMUS/FALL LOOT-BACK = LOOTER S BACKDIRT



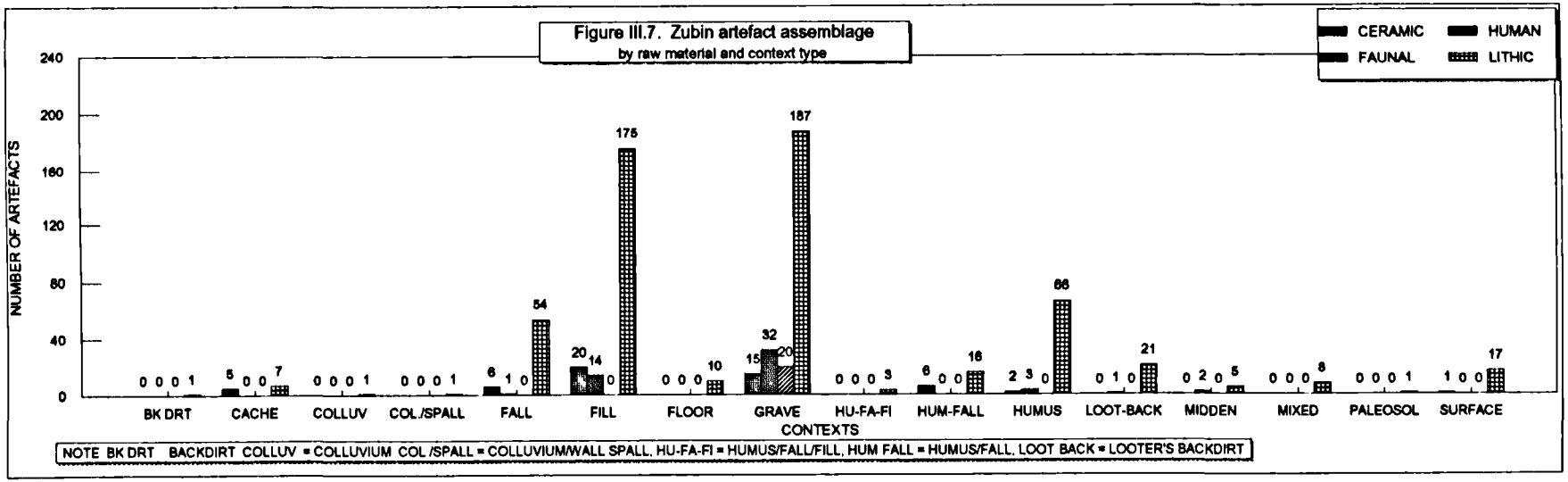
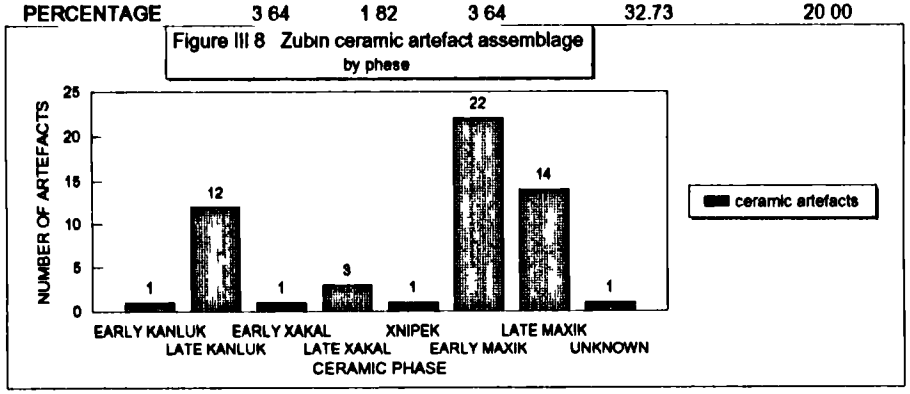
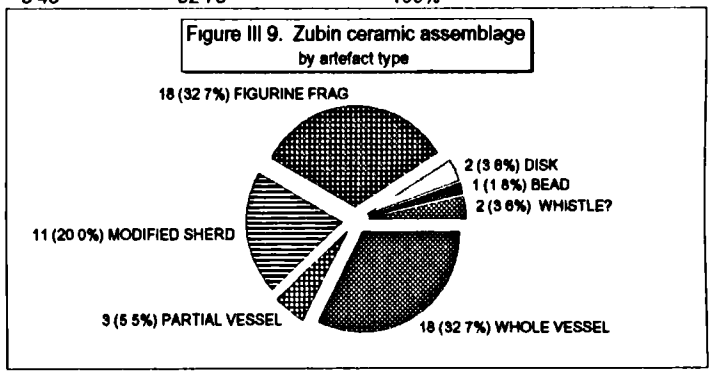


Table III 4. Zubin ceramic assemblage by phase and artefact type.

	WHISTLE?	BEAD	DISK	FIGURINE FRAG.	MODIFIED SHERD	PARTIAL VESSEL	WHOLE VESSEL	TOTAL	PERCENTAGE
EARLY KANLUK	0	0	0	1	0	0	0	1	1 82
LATE KANLUK	0	0	0	12	0	0	0	12	21 82
EARLY XAKAL	0	0	0	1	0	0	0	1	1 82
LATE XAKAL	0	0	0	0	0	0	3	3	5 45
XNIPEK	0	0	0	0	1	0	0	1	1 82
EARLY MAXIK	0	0	1	0	4	3	14	22	40 00
LATE MAXIK	2	1	1	3	6	0	1	14	25 45
UNKNOWN	0	0	0	1	0	0	0	1	1 82
TOTAL	2	1	2	18	11	3	18	55	
PERCENTAGE	3 64	1 82	3 64	32.73	20 00	5 45	32 73		100%





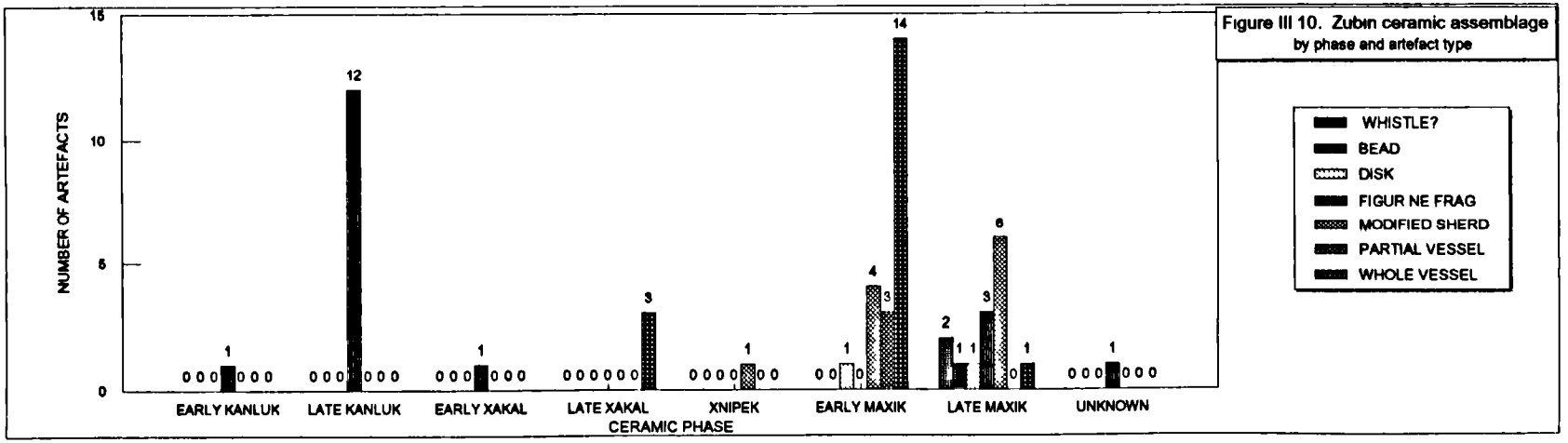
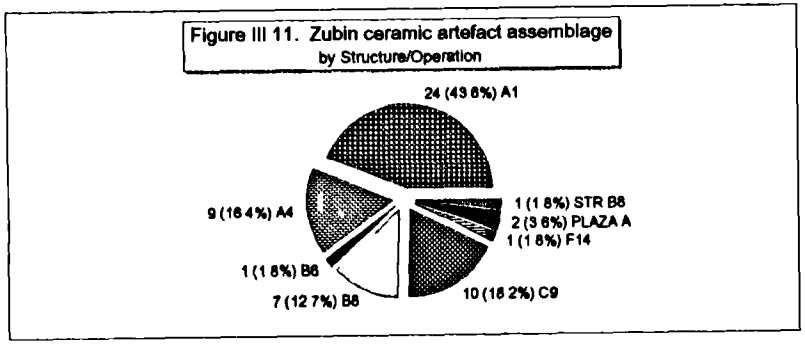


Table III.5. Zubin ceramic assemblage by artefact type and Structure/Operation.

	A1	A4	B6	B8	C9	F14	PLAZA A	STR.B8	TOTAL	PERCENTAGE
BEAD	0	0	0	0	0	0	0	1	1	1 82
DISK	0	1	0	1	0	0	0	0	2	3 64
FIGURINE FRAG	2	2	0	2	10	0	2	0	18	32 73
MODIFIED SHERD	4	3	0	3	0	1	0	0	11	20 00
PARTIAL VESSEL	1	2	0	0	0	0	0	0	3	5 45
WHISTLE?	0	1	1	0	0	0	0	0	2	3 64
WHOLE VESSEL	17	0	0	1	0	0	0	0	18	32.73
TOTAL	24	9	1	7	10	1	2	1	55	
PERCENTAGE	43 64	16 36	1.82	12 73	18 18	1 82	3 64	1.82		100%



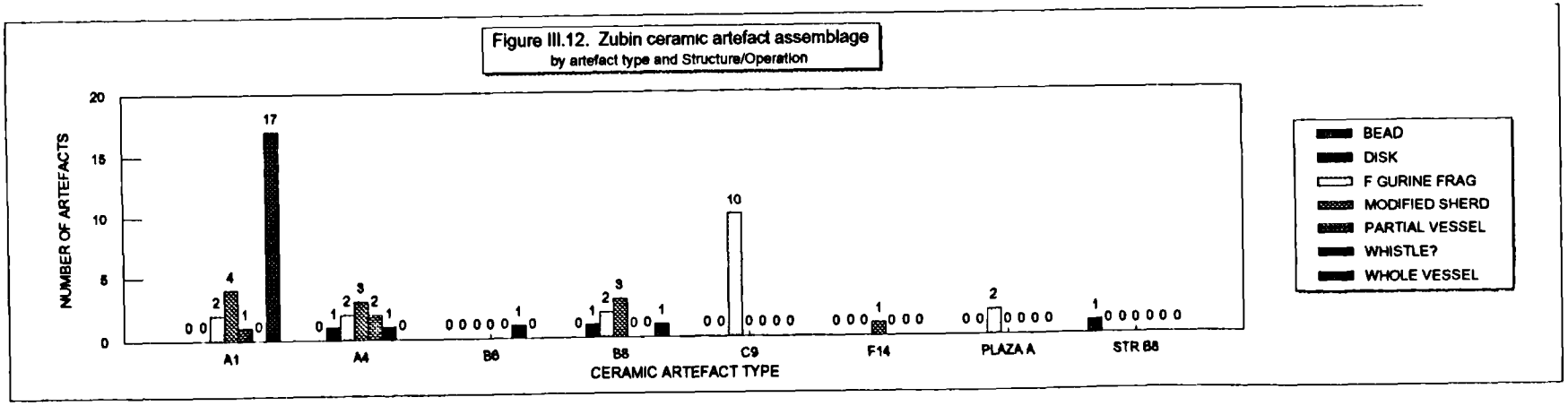


Table III.6. Zubin ceramic assemble by artefact type and context type.

	CACHE	FALL	FILL	GRAVE	HUM-FALL	HUMUS	SURFACE	TOTAL	PERCENTAGE
BEAD	0	1	0	0	0	0	0	1	1 82
DISK	0	0	1	0	1	0	0	2	3 64
FIGURINE FRAG.	0	0	14	0	2	1	1	18	32.73
MODIFIED SHERD	0	4	5	0	2	0	0	11	20.00
PARTIAL VESSEL	2	0	0	1	0	0	0	3	5.45
WHISTLE?	0	1	0	0	1	0	0	2	3 64
WHOLE VESSEL	3	0	0	14	0	1	0	18	32 73
TOTAL	5	6	20	15	6	2	1	55	
PERCENTAGE	9 09	10 91	36 36	27 27	10.91	3.64	1.82		100%

Figure III 13. Zubin ceramic artefact assemblage
by context type

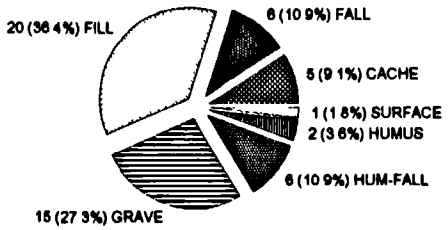


Figure III.14. Zubin ceramic assemblage
by artefact type and context type

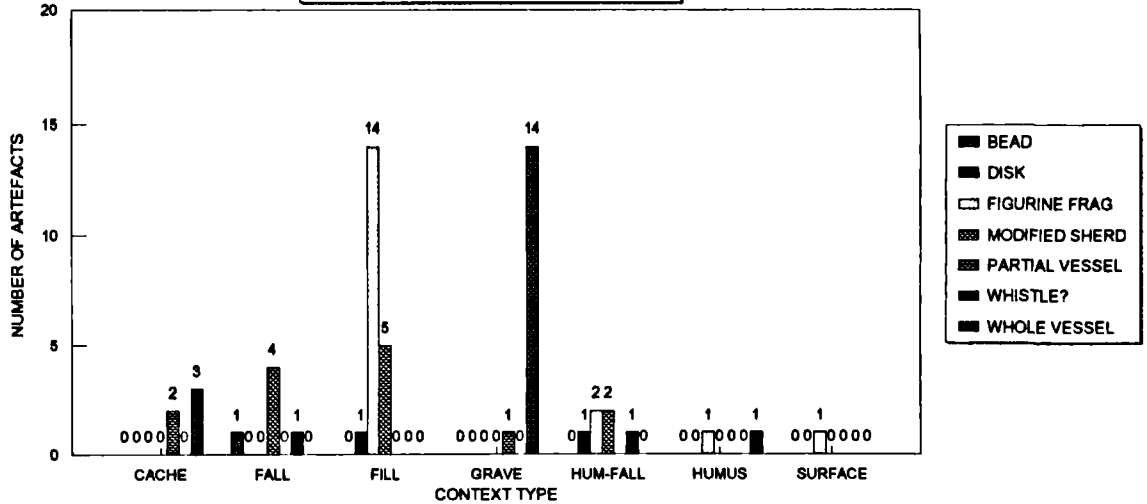


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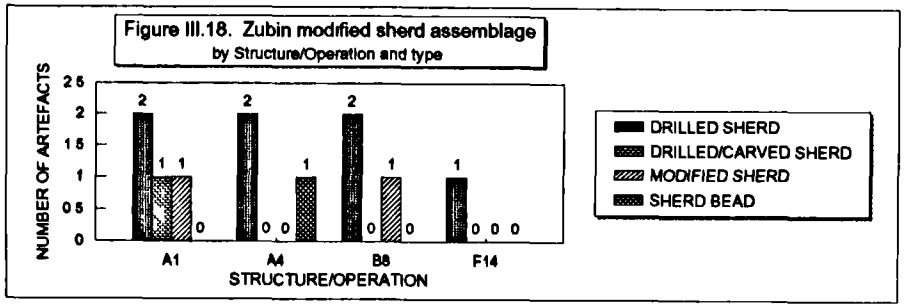
Table III.8. Zubin modified sherd assemblage by modification type and Structure/Operation.

	A1	A4	B8	F14	TOTAL	PERCENTAGE
DRILLED SHERD	2	2	2	1	7	63.64
DRILLED/CARVED SHERD	1	0	0	0	1	9.09
MODIFIED SHERD	1	0	1	0	2	18.18
SHERD BEAD	0	1	0	0	1	9.09
TOTAL	4	3	3	1	11	
PERCENTAGE	36 36	27.27	27.27	9.09		100%



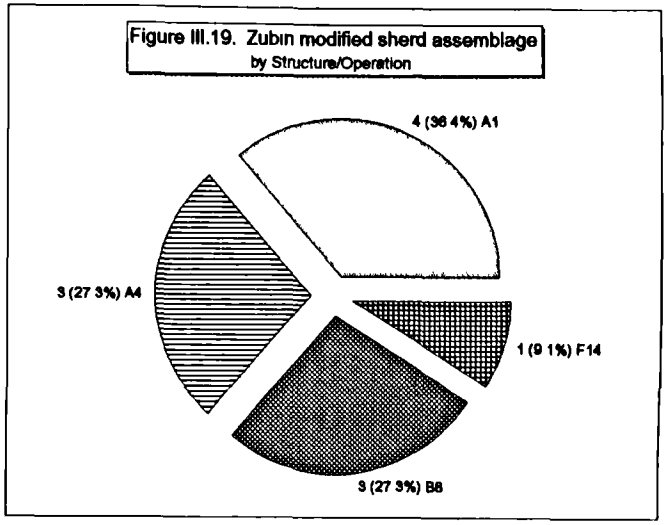
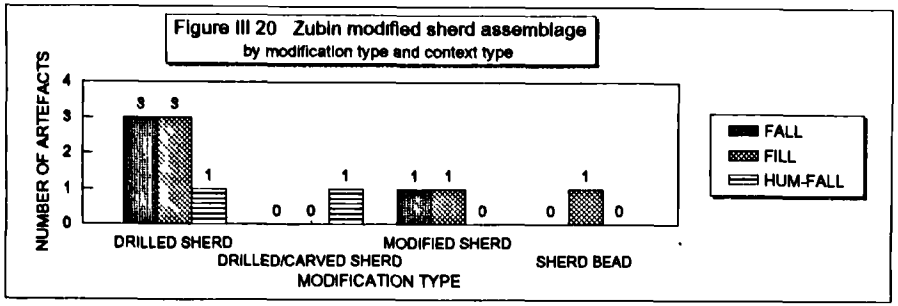
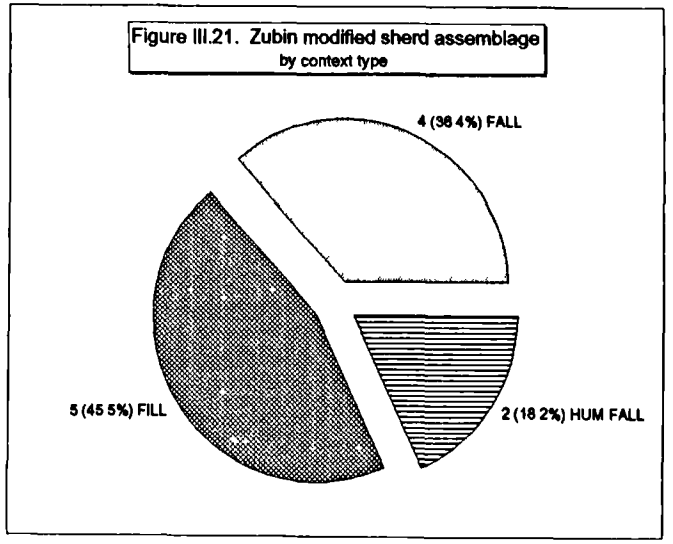


Table III.9. Zubin modified sherd assemblage by modification type and context type.

	FALL	FILL	HUM-FALL	TOTAL	PERCENTAGE
DRILLED SHERD	3	3	1	7	63.64
DRILLED/CARVED SHERD	0	0	1	1	9.09
MODIFIED SHERD	1	1	0	2	18.18
SHERD BEAD	0	1	0	1	9.09
TOTAL	4	5	2	11	
PERCENTAGE	36 36	45.45	18.18		100%





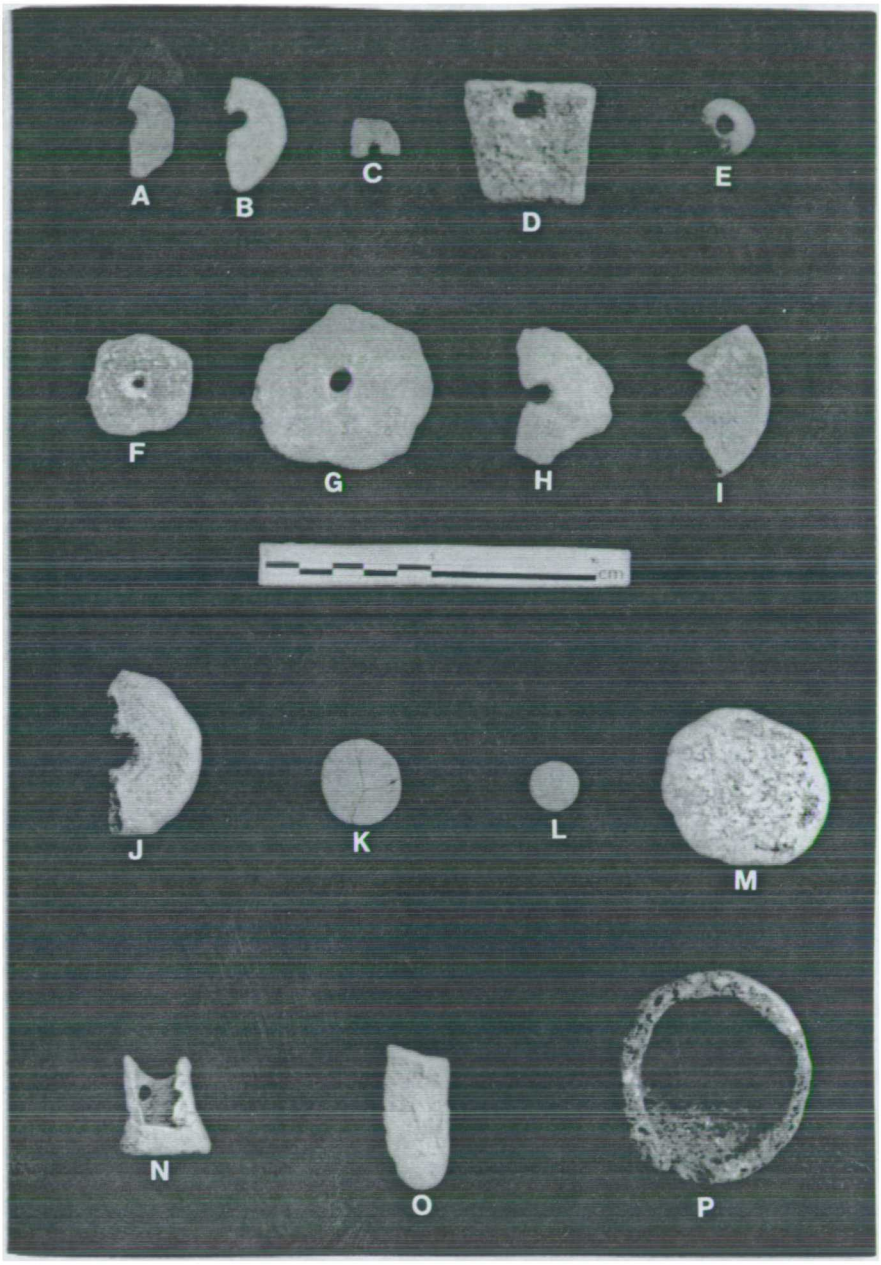
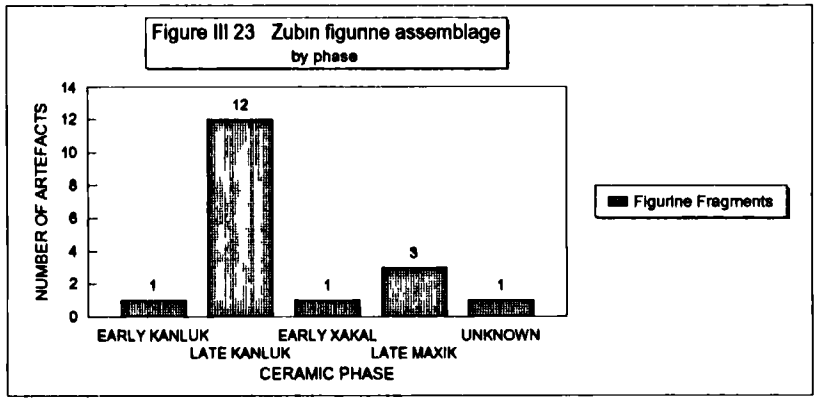
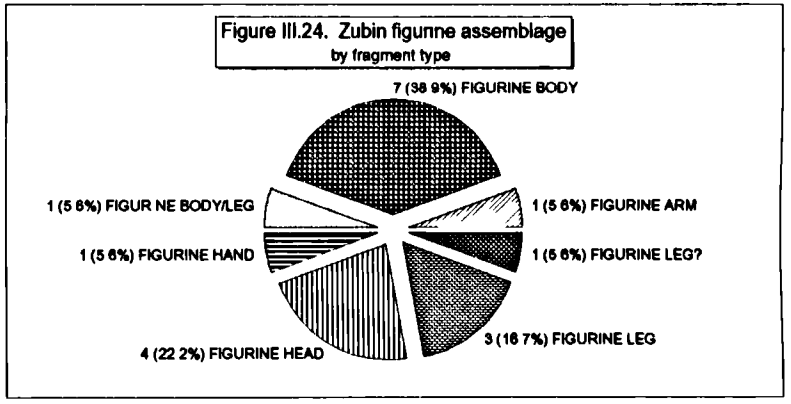


Figure III 22 Miscellaneous ceramic finds from Zubin (a) drilled sherd (A4-SF 149), (b) sherd bead (A4-SF 32), (c) drilled sherd (F14-SF 3), (d) drilled/carved sherd (A1-SF 250), (e) bead (B8-SF 11), (f) drilled sherd (A1-SF 32), (g) drilled sherd (B8-SF 3), (h) drilled sherd (B8-SF 6), (i) drilled sherd (A1-SF 21), (j) drilled sherd (A4-SF 5), (k) disk (B8-SF 22), (l) disk (A4-SF 148) (m) modified sherd (A1-SF 7), (n) whistle frag (B6 SF 5), (o) modified sherd (B8-SF 7), (p) miniature vessel (B8-SF 8)

Table III.10. Zubin figurine assemblage by phase and fragment type.

	FIGURINE ARM	FIGURINE BODY	FIGURINE BODY/LEG	FIGURINE HAND	FIGURINE HEAD	FIGURINE LEG	FIGURINE LEG?	TOTAL	PERCENTAGE
EARLY KANLUK	0	0	0	0	0	0	1	1	5 56
LATE KANLUK	0	6	1	1	2	2	0	12	66 67
EARLY XAKAL	0	1	0	0	0	0	0	1	5 56
LATE MAXIK	1	0	0	0	1	1	0	3	16 67
UNKNOWN	0	0	0	0	1	0	0	1	5 56
TOTAL	1	7	1	1	4	3	1	18	
PERCENTAGE	5 56	38 89	5 56	5.56	22.22	16.67	5 56		100





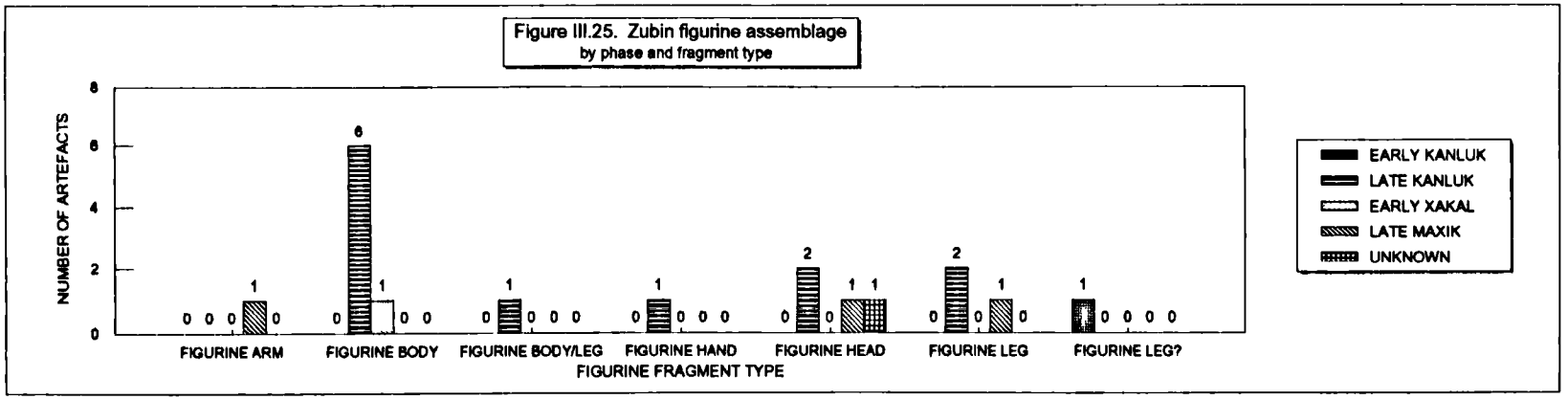


Table III.11. Zubin figurine assemblage by fragment type and Structure/Operation.

	A1	A4	B8	C9	PLAZA A	TOTAL	PERCENTAGE
FIGURINE ARM	0	0	1	0	0	1	5.56
FIGURINE BODY	0	1	0	6	0	7	38 89
FIGURINE BODY/LEG	1	0	0	0	0	1	5 56
FIGURINE HAND	0	0	0	0	1	1	5.56
FIGURINE HEAD	1	1	0	2	0	4	22 22
FIGURINE LEG	0	0	1	1	1	3	16 67
FIGURINE LEG?	0	0	0	1	0	1	5.56
TOTAL	2	2	2	10	2	18	
PERCENTAGE	11.11	11 11	11 11	55 56	11.11		100%

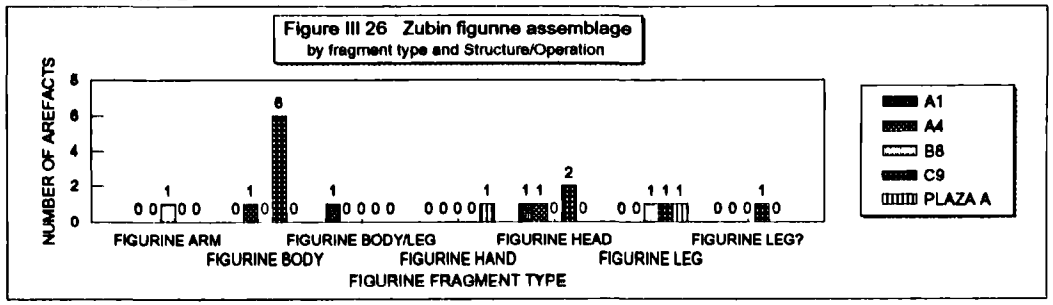
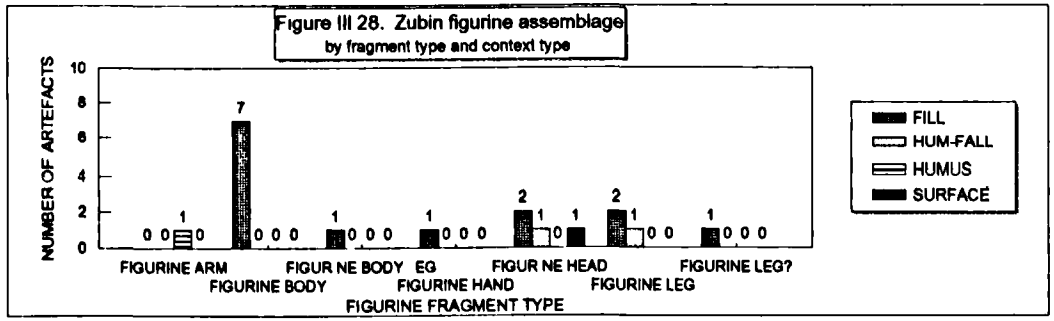
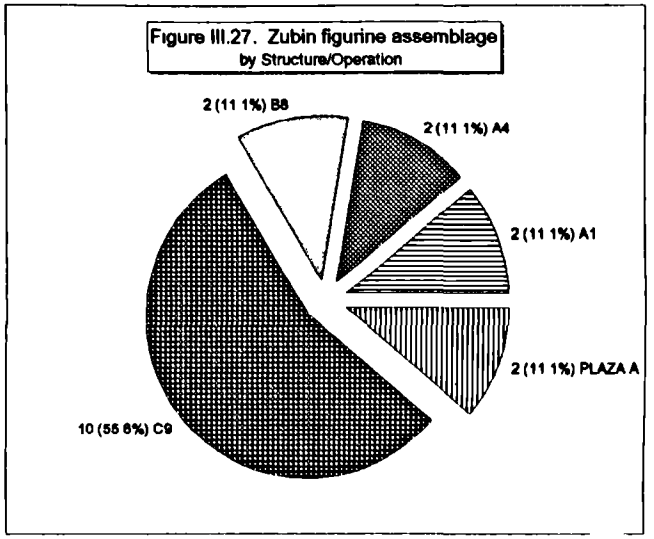
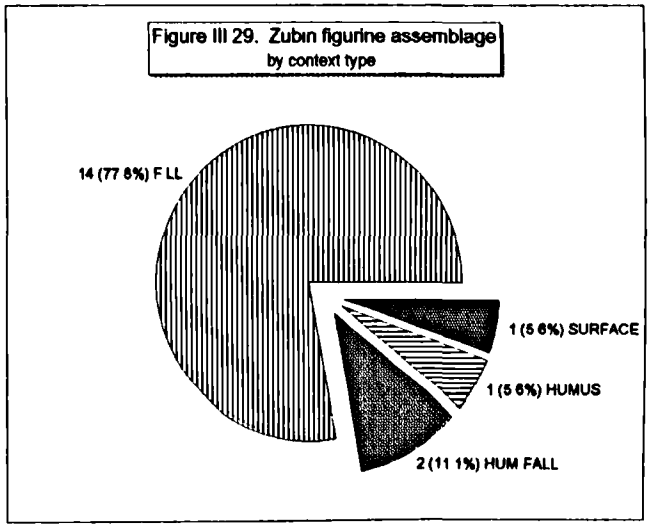


Table III.12. Zubin figurine assemblage by fragment type and context type.

	FILL	HUM FALL	HUMUS	SURFACE	TOTAL	PERCENTAGE
FIGURINE ARM	0	0	1	0	1	5.56
FIGURINE BODY	7	0	0	0	7	38 89
FIGURINE BODY/LEG	1	0	0	0	1	5.56
FIGURINE HAND	1	0	0	0	1	5 56
FIGURINE HEAD	2	1	0	1	4	22 22
FIGURINE LEG	2	1	0	0	3	16.67
FIGURINE LEG?	1	0	0	0	1	5 56
TOTAL	14	2	1	1	18	
PERCENTAGE	77 78	11 11	5.56	5.56		100%







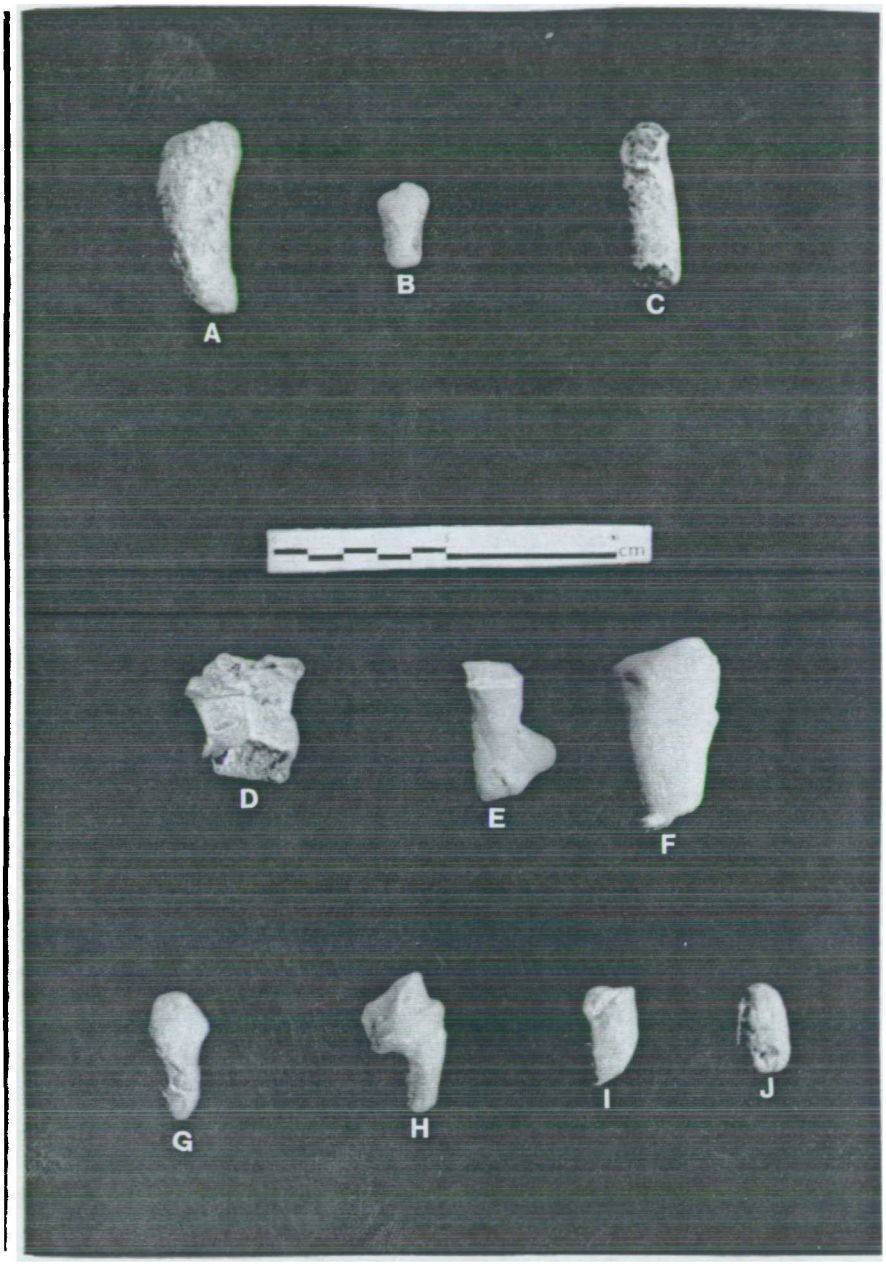


Figure III 30 Miscellaneous figurine leg (a, f, j), hand (b), arm (c), and body (d, e, g, h, i) fragments from Zubin (a) AP-SF 4, (b) AP-SF 5, (c) B8-SF 5, (d) C9-SF 43, (e) C9-SF 46, (f) C9-SF 47, (g) C9-SF 13, (h) C9-SF 44, (i) C9-SF 14, (j) B8-SF 23

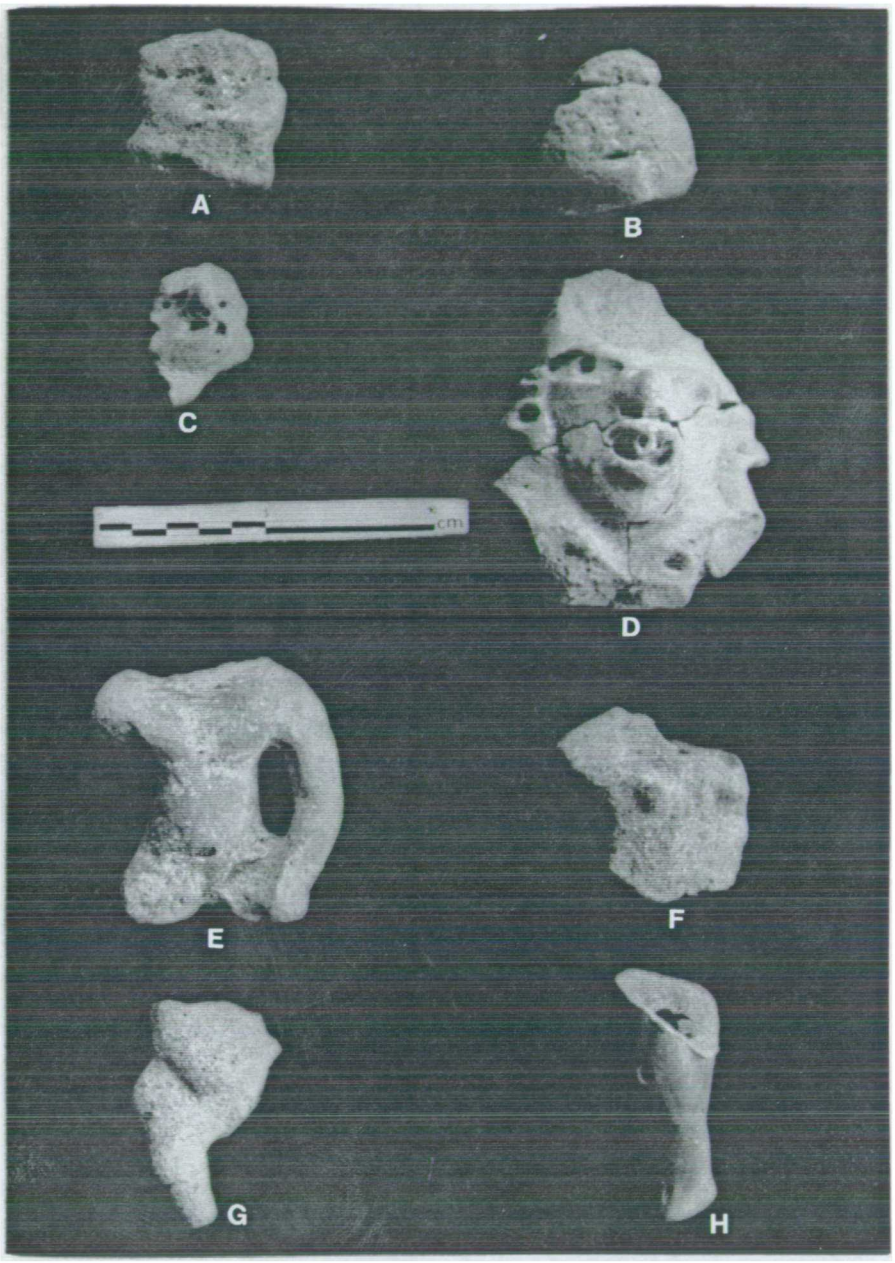


Figure III 31 Figurine head (a-d), body (e-g), and leg (h) fragments from Zubin (a) A1-SF 31, (b) A4-SF 45, (c) C9-SF 42, (d) C9-SF 11, (e) C9-SF 12, (f) A4-SF 38, (g) A1-SF 249, h) C9-SF 45

Table III.13. Zubin whole ceramic vessel assemblage by phase and Type:Variety.

	LATE XAKAL	EARLY MAXIK	LATE MAXIK	TOTAL	PERCENTAGE
DOLPHIN HEAD RED BOWL	0	3	0	3	11.11
DOLPHIN HEAD RED PLATE	0	1	0	1	5.56
GARBUTT CREEK RED BOWL	0	1	0	1	5.56
MINIATURE UNSLIPPED VESSEL	0	0	1	1	5.56
MONTEGO POLYCHROME VASE	0	1	0	1	5.56
MOUNT MALONEY BLACK BOWL	0	1	0	1	5.56
MOUNTAIN PINE RED DISH	0	1	0	1	5.56
ORANGE WALK INCISED BOWL	0	2	0	2	11.11
PUCTE BROWN? BOWL	2	0	0	2	11.11
PUCTE BROWN? JAR	1	0	0	1	5.56
SAN PEDRO IMPRESSED DISH	0	2	0	2	11.11
SAXCHE ORANGE POLYCHROME BOWL	0	1	0	1	5.56
SOTERO RED BROWN VASE	0	1	0	1	5.56
TOTAL	3	14	1	18	
PERCENTAGE	16 67	77.78	5.56		100%

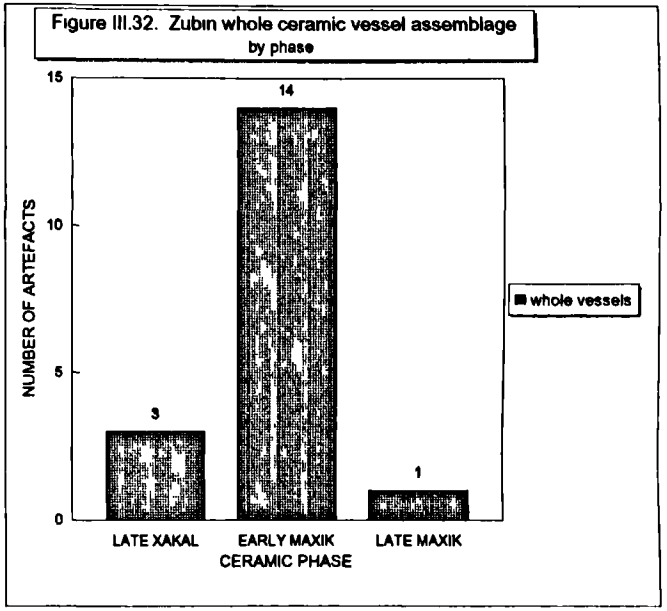


Table III.14. Zubin whole ceramic vessel assemblage by context type and Type:Variety.

	CACHE	GRAVE	HUMUS	TOTAL	PERCENTAGE
DOLPHIN HEAD RED BOWL	0	3	0	3	16.67
DOLPHIN HEAD RED PLATE	0	1	0	1	5 56
GARBUTT CREEK RED BOWL	0	1	0	1	5.56
MINIATURE UNSLIPPED VESSEL	0	0	1	1	5 56
MONTEGO POLYCHROME VASE	0	1	0	1	5.56
MOUNT MALONEY BLACK BOWL	1	0	0	1	5.56
MOUNTAIN PINE RED DISH	0	1	0	1	5.56
ORANGE WALK INCISED BOWL	0	2	0	2	11.11
PUCTE BROWN? BOWL	0	2	0	2	11.11
PUCTE BROWN? JAR	0	1	0	1	5.56
SAN PEDRO IMPRESSED DISH	2	0	0	2	11.11
SAXCHE ORANGE POLYCHROME BOWL	0	1	0	1	5.56
SOTERO RED BROWN VASE	0	1	0	1	5.56
TOTAL	3	14	1	18	
PERCENTAGE	16 67	77.78	5.56		100%

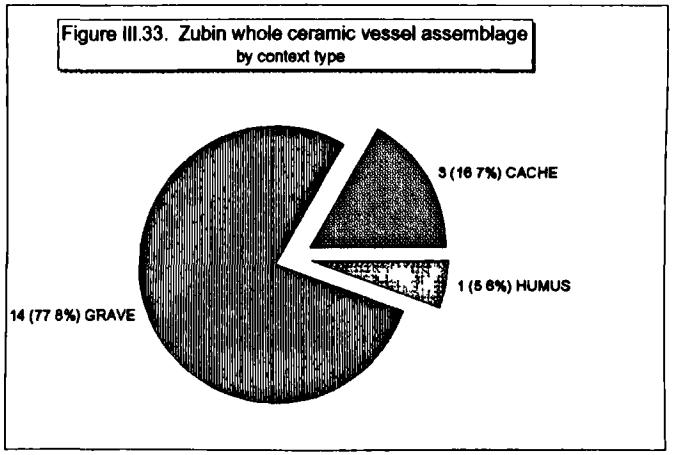
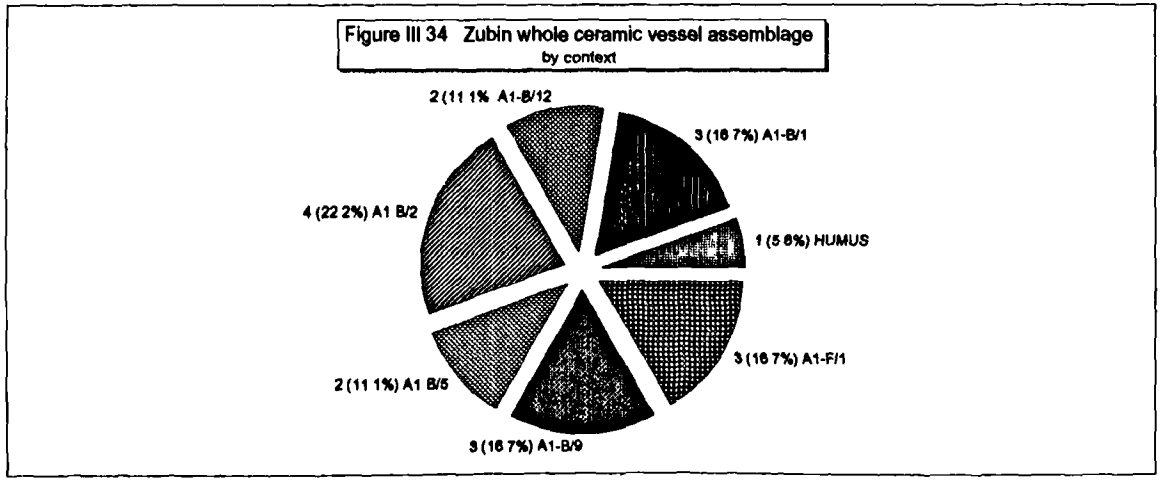


Table III.15. Zubin whole ceramic vessel assemblage by context and Type:Variety.

	HUMUS	A1-B/1	A1-B/12	A1-B/2	A1 B/5	A1-B/9	A1-F/1	TOTAL	PERCENTAGE
DOLPHIN HEAD RED BOWL	0	0	0	3	0	0	0	3	16 67
DOLPHIN HEAD RED PLATE	0	1	0	0	0	0	0	1	5 56
GARBUTT CREEK RED BOWL	0	0	0	0	1	0	0	1	5.56
MINIATURE UNSLIPPED VESSEL	1	0	0	0	0	0	0	1	5 56
MONTEGO POLYCHROME VASE	0	0	1	0	0	0	0	1	5.56
MOUNT MALONEY BLACK BOWL	0	0	0	0	0	0	1	1	5.56
MOUNTAIN PINE RED DISH	0	0	1	0	0	0	0	1	5.56
ORANGE WALK INCISED BOWL	0	2	0	0	0	0	0	2	11.11
PUCTE BROWN? BOWL	0	0	0	0	0	2	0	2	11 11
PUCTE BROWN? JAR	0	0	0	0	0	1	0	1	5.56
SAN PEDRO IMPRESSED DISH	0	0	0	0	0	0	2	2	11.11
SAXCHE ORANGE POLYCHROME BOWL	0	0	0	1	0	0	0	1	5.56
SOTERO RED BROWN VASE	0	0	0	0	1	0	0	1	5.56
TOTAL	1	3	2	4	2	3	3	18	
PERCENTAGE	5 56	16 67	11 11	22.22	11.11	16 67	16.67		100%



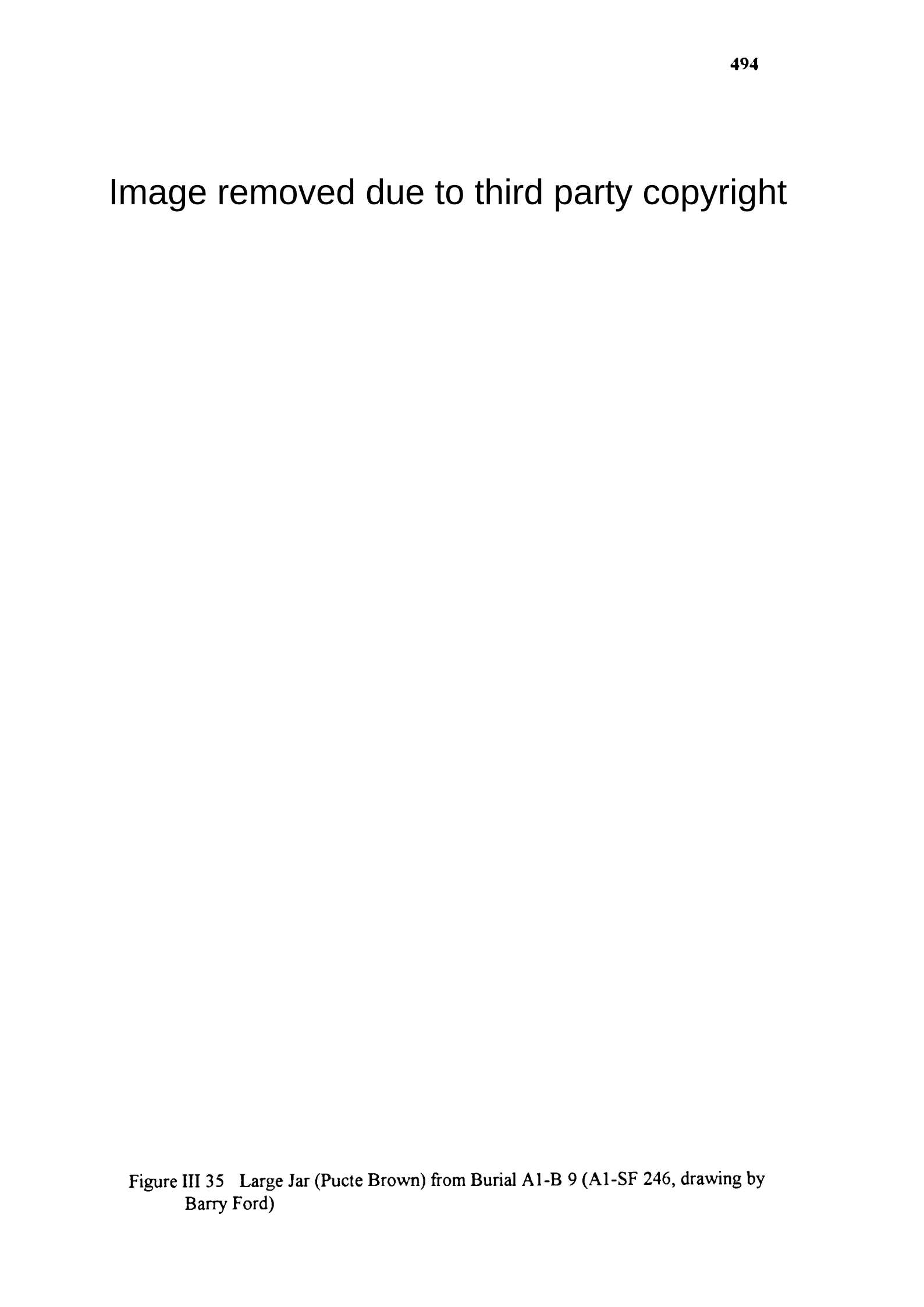


Figure III 35 Large Jar (Pucte Brown) from Burial A1-B 9 (A1-SF 246, drawing by Barry Ford)

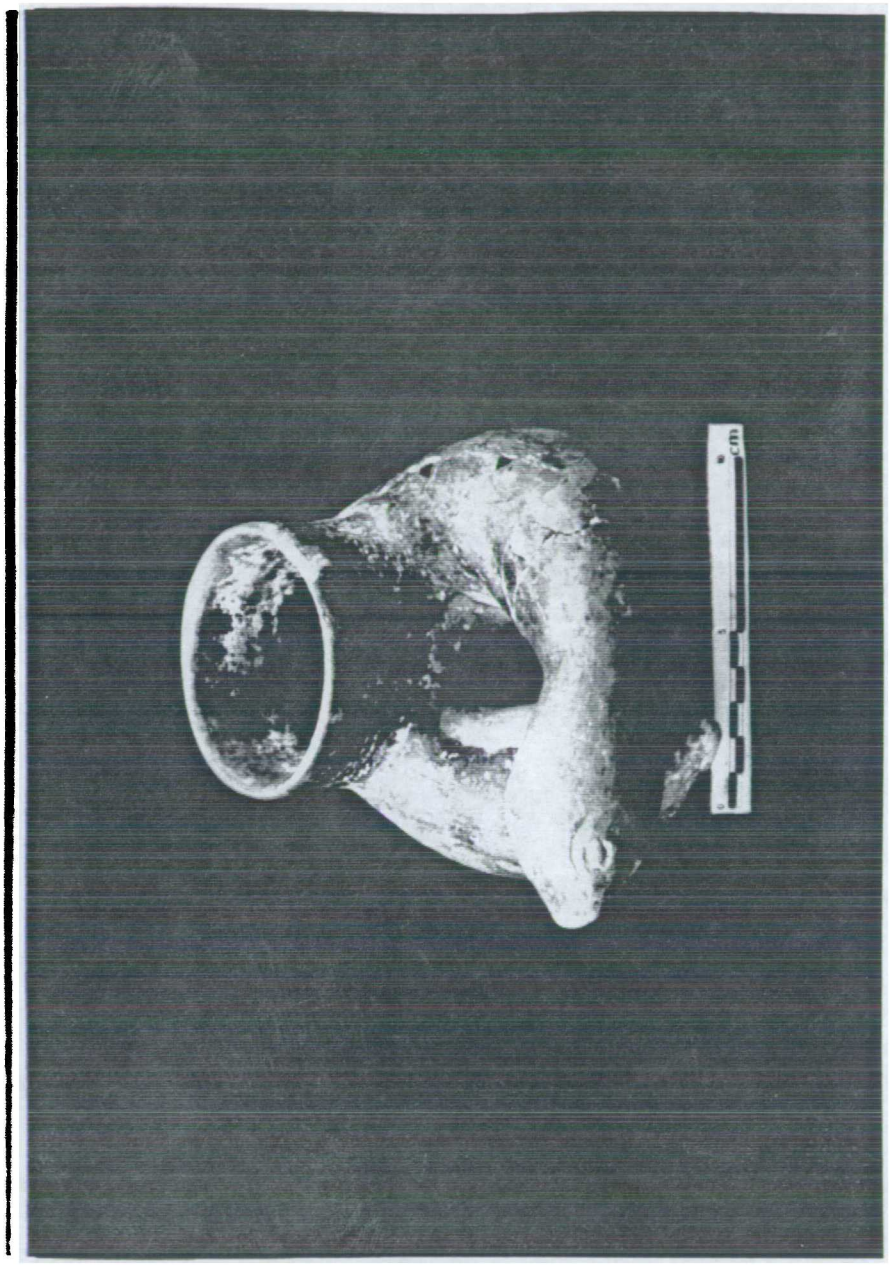


Figure III 36 "Snake" vessel from Burial A1-B 9 (A1-SF 247)

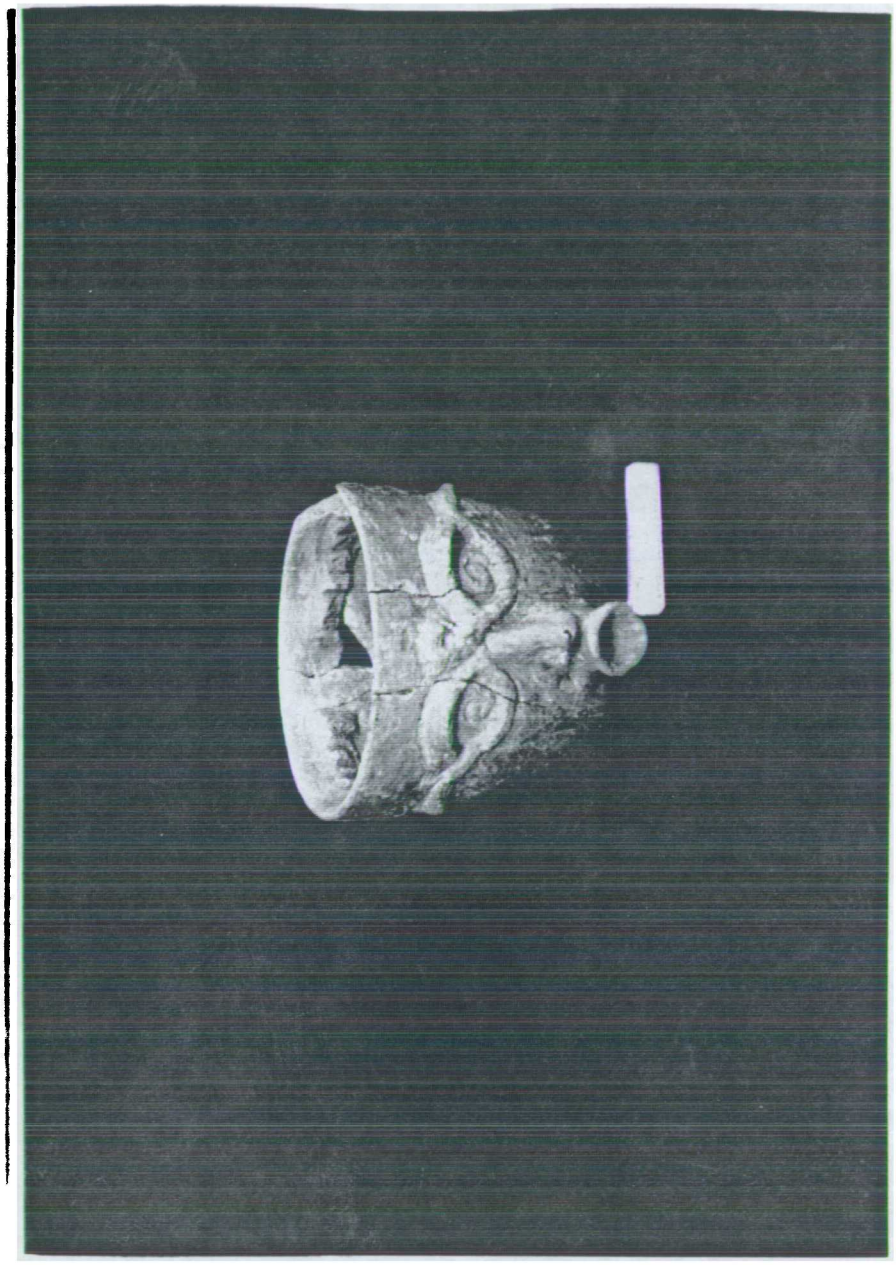


Figure III 37 Jaguar God of the Underworld bowl from Burial A1-B 9 (A1-SF 248)

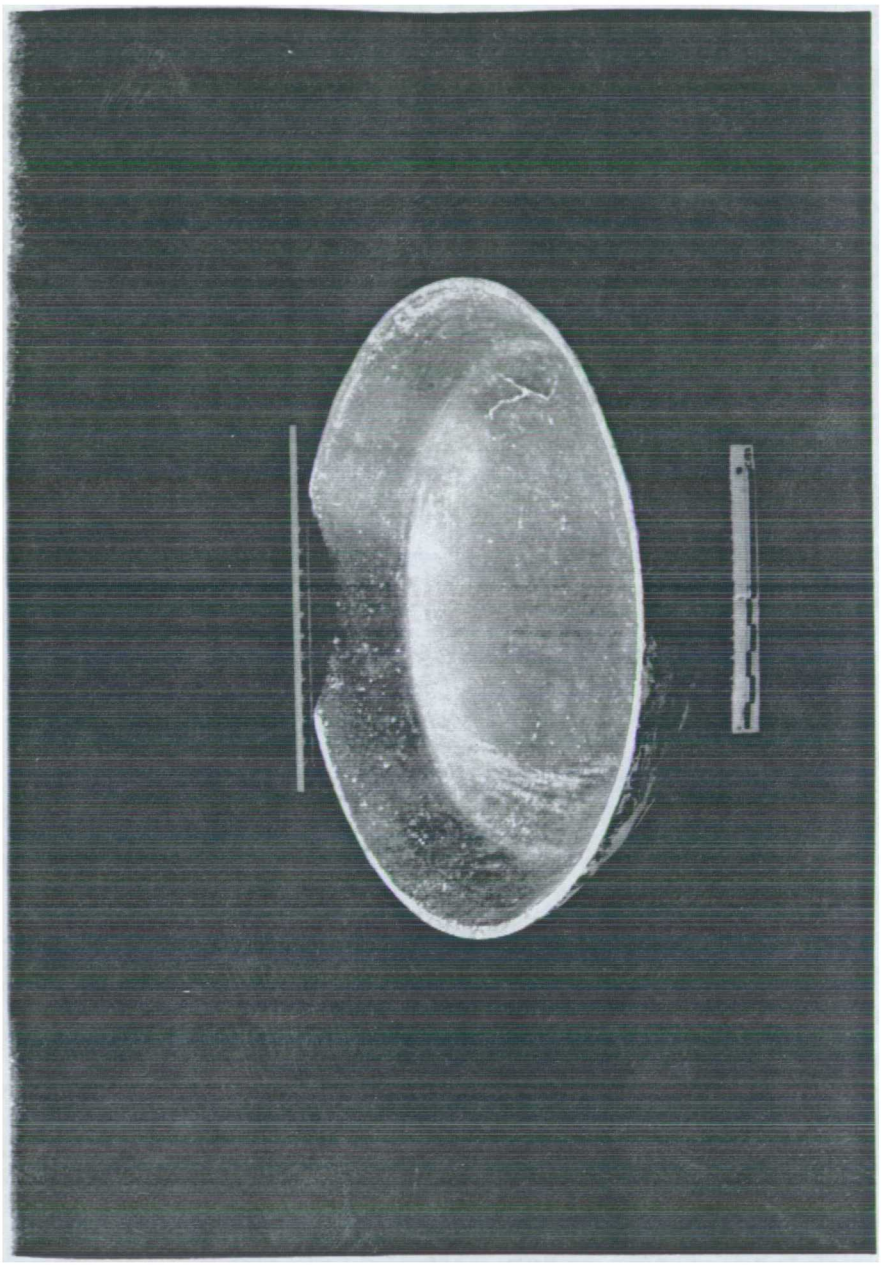


Figure III 38 San Pedro Impressed San Pedro Variety dish from Burial A1 B 7 (A1-SF 239)

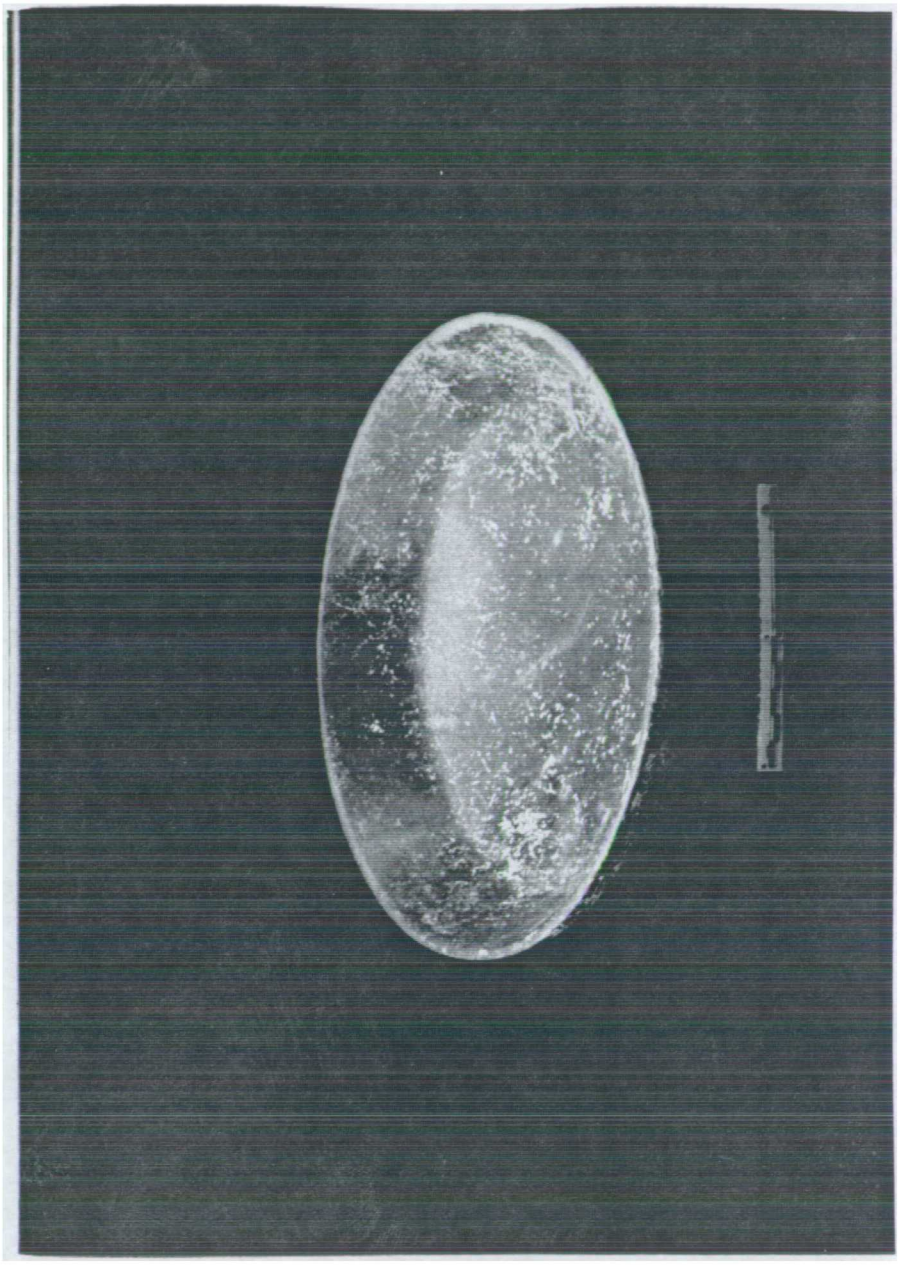


Figure III 39 San Pedro Impressed San Pedro Variety dish from Burial A1-B 7 (A1-SF 240)

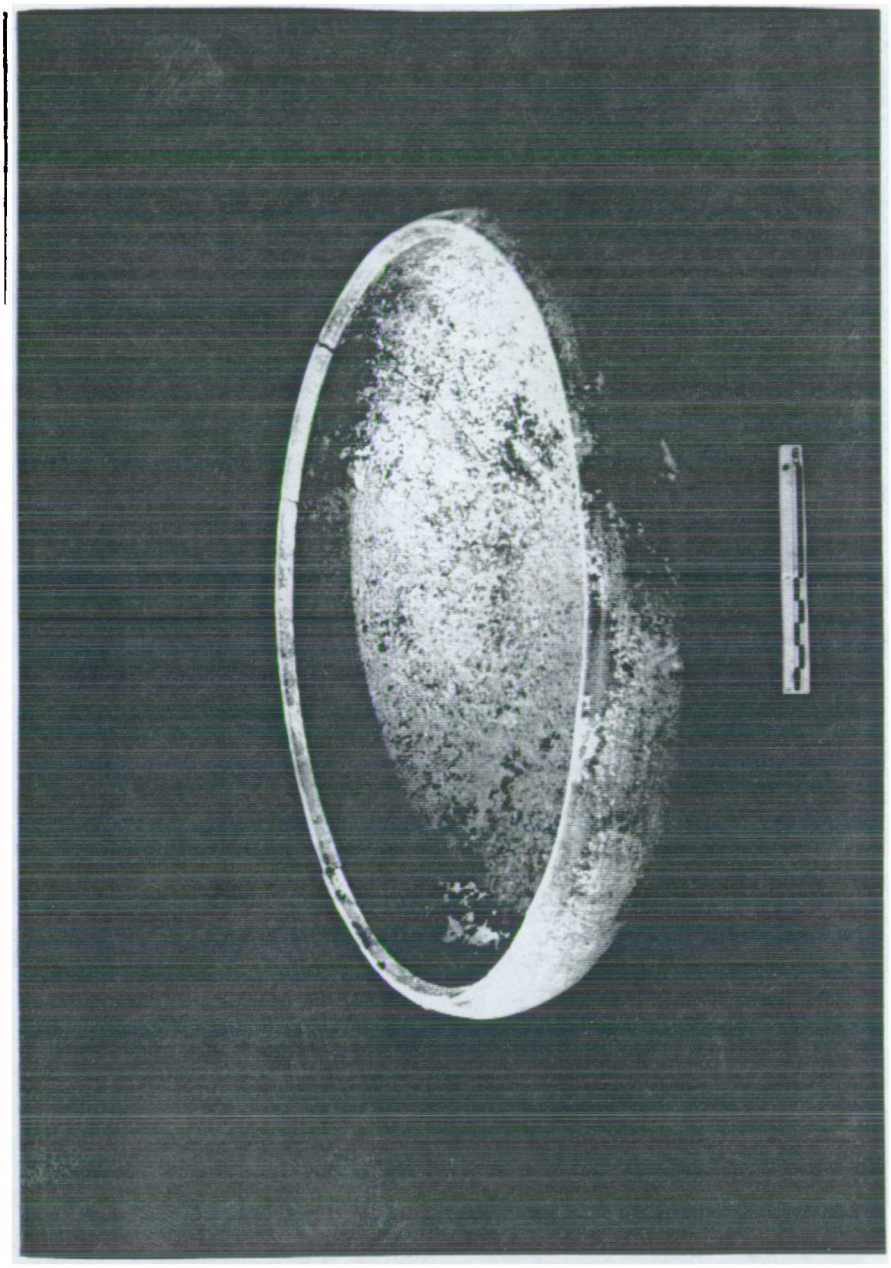


Figure III 40 Mount Maloney Black Mount Maloney Variety bowl from Cache A1-F 1 (A1-SF 241)

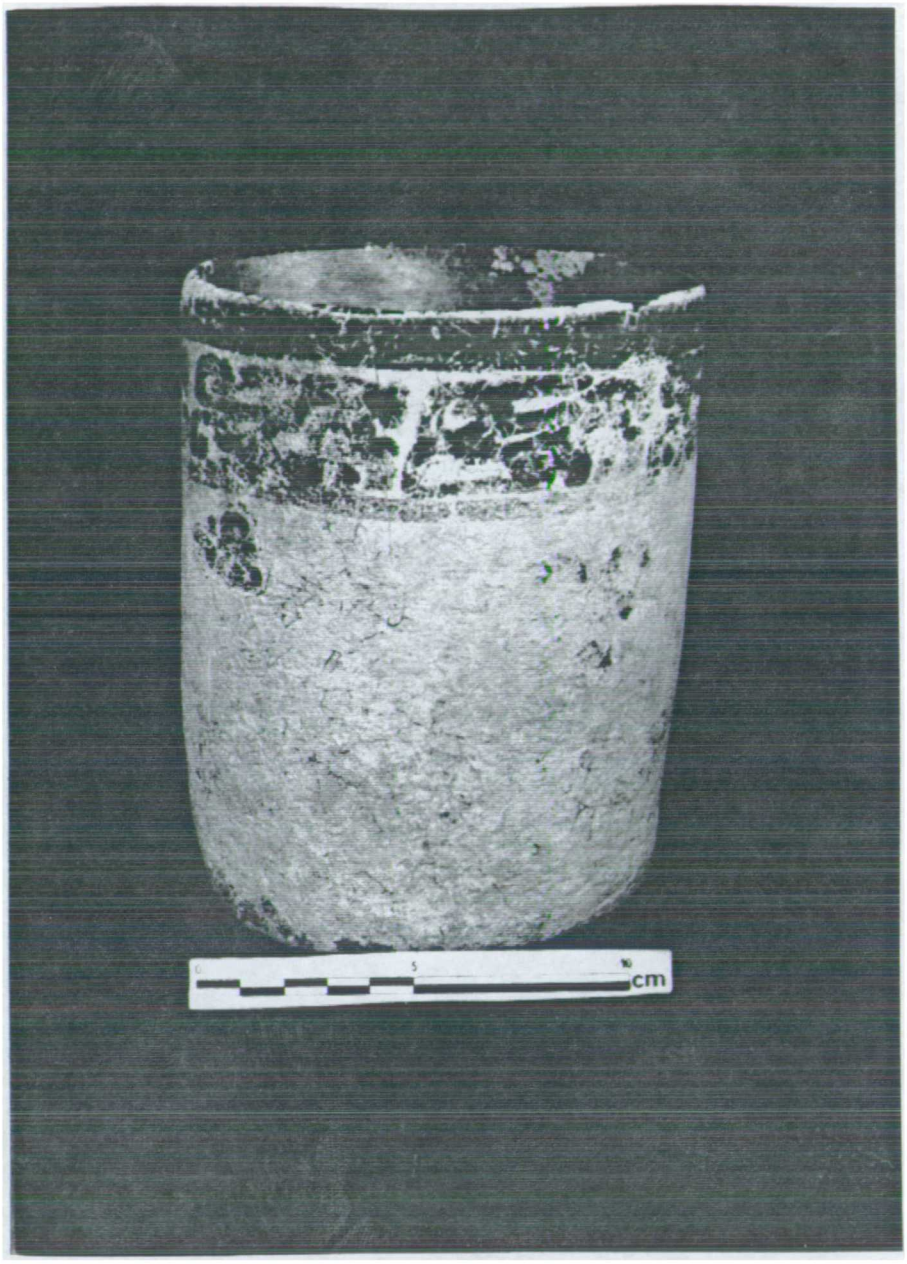


Figure III 41 Montego Polychrome Montego Variety cylinder vase from Burial A1-B 12 (A1-SF 245)

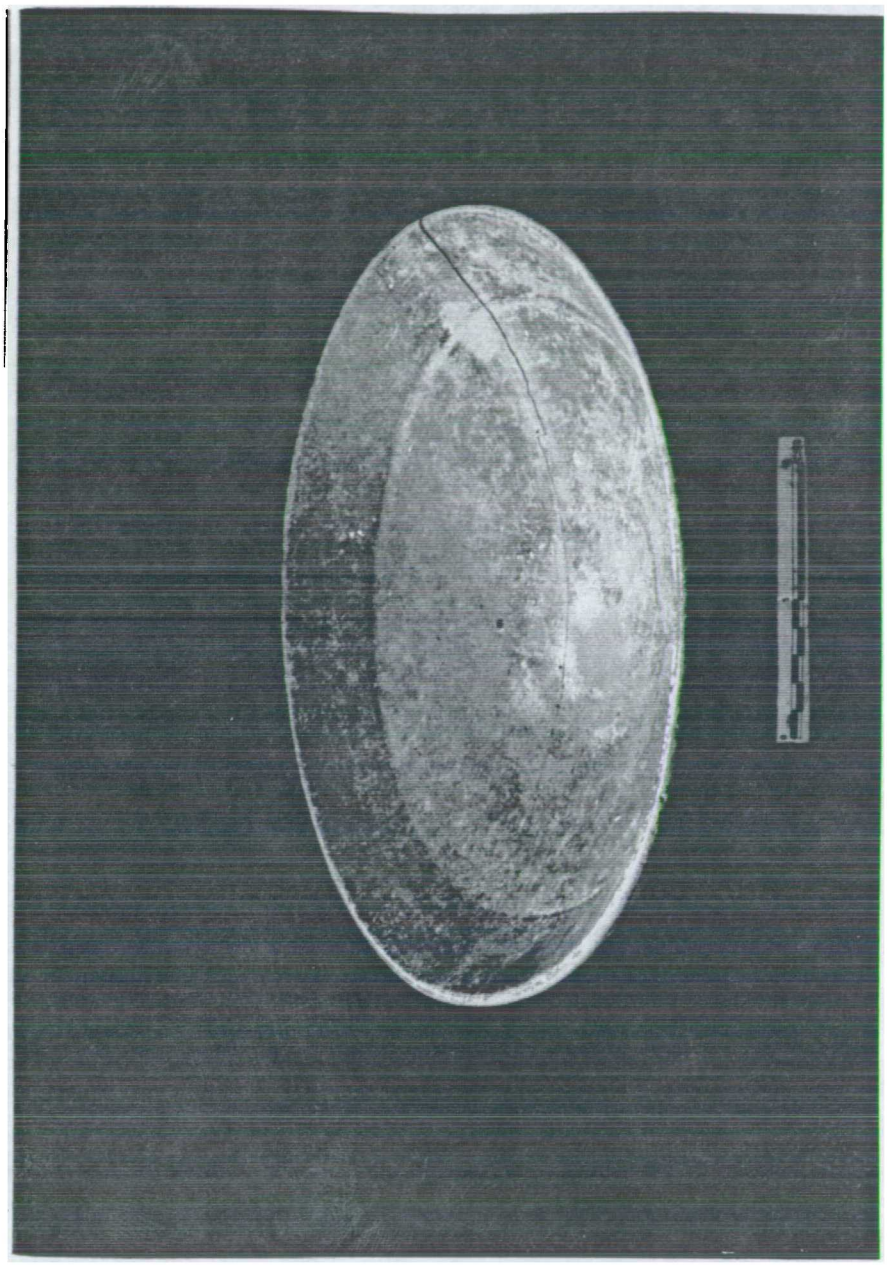


Figure III 42 Mountain Pine Red Mountain Pine Variety dish from Buria A1-B 12 (A1-SF A1-SF 244)

Figure III 43 Sotero Red-Brown Sotero Variety vase from Burial A1-B 5 (A1-SF 242)

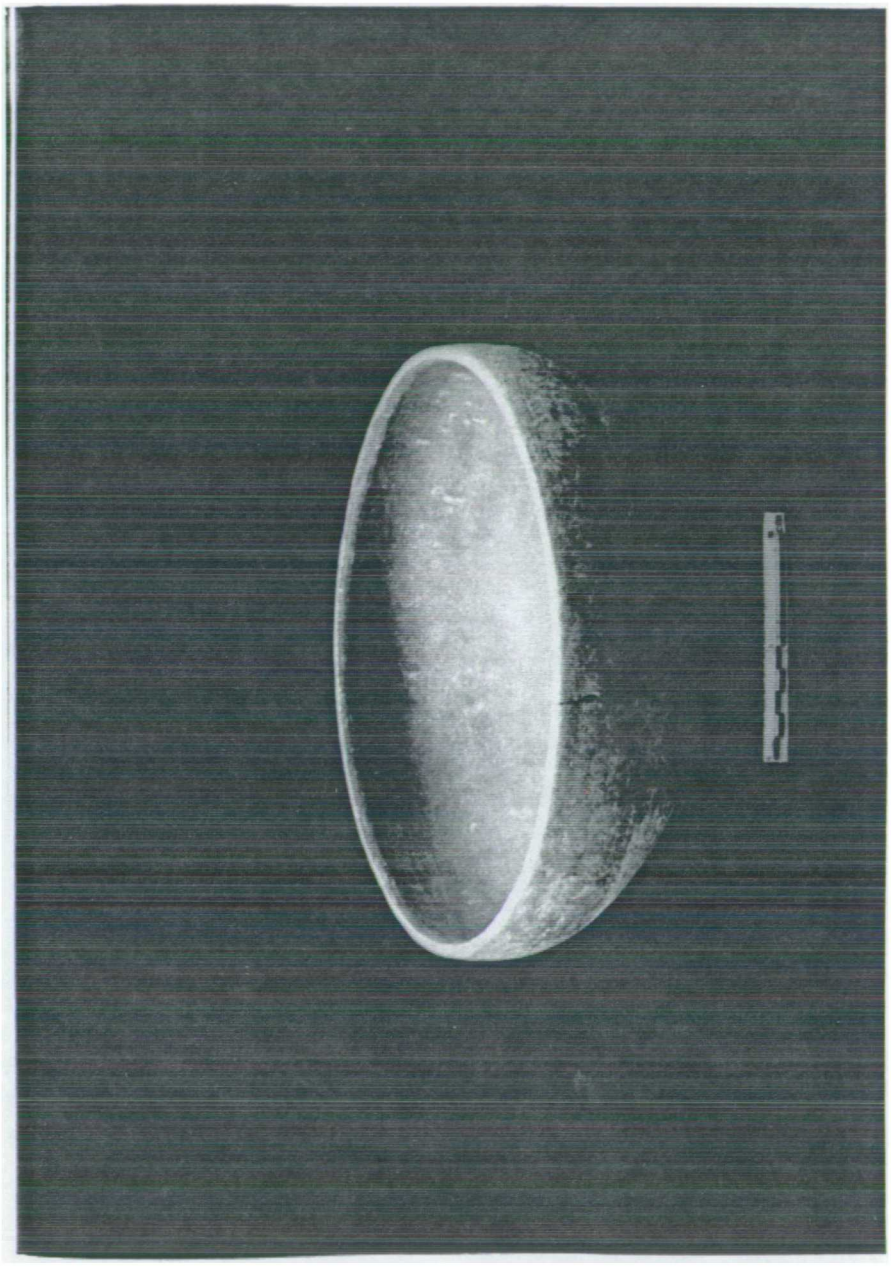


Figure III 44 Garbutt Creek Red Paslow Variety bowl from Burial A1-B 5 (A1-SF 243)

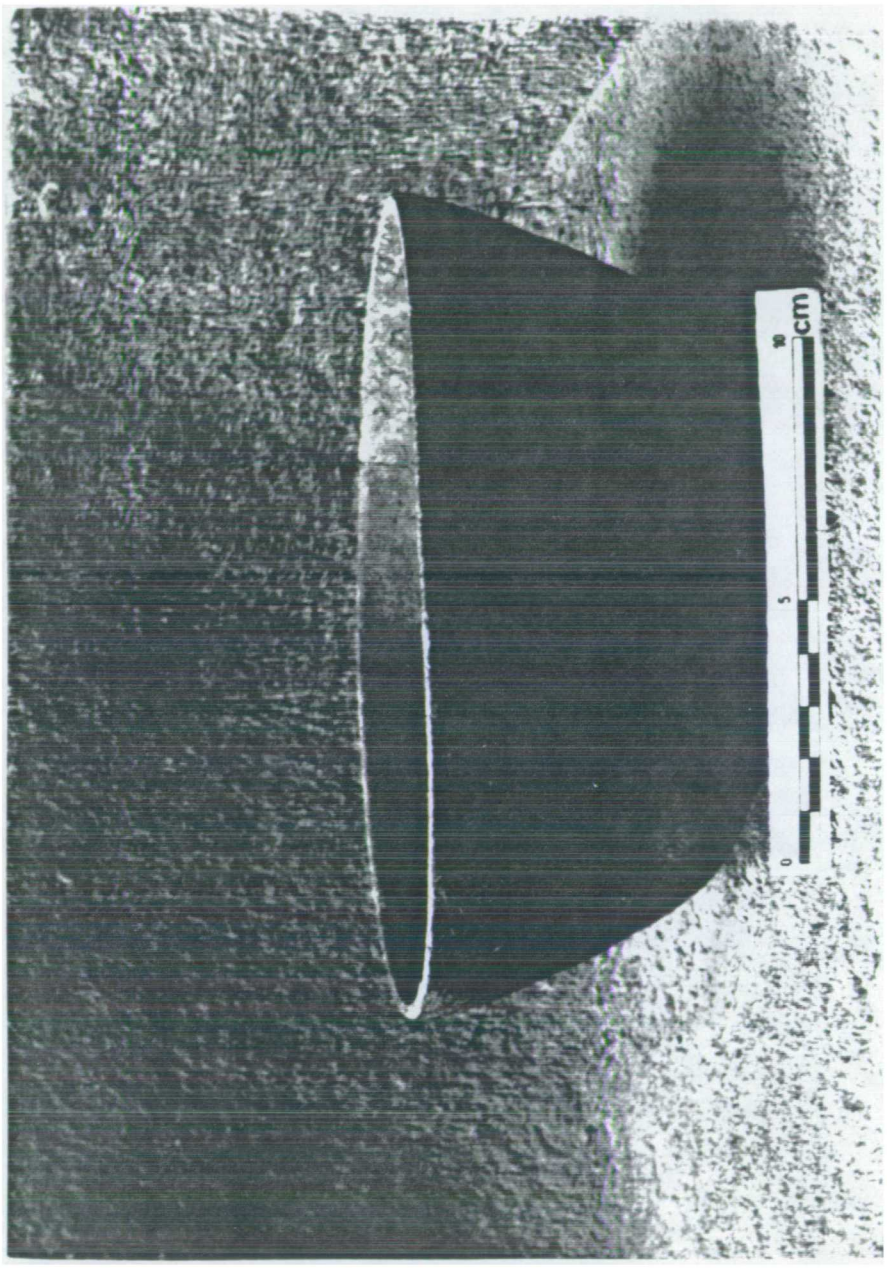


Figure III 45 Dolphin Head Red Dolphin Head Variety bowl from Burial A1-B 2 (A1-SF 25)

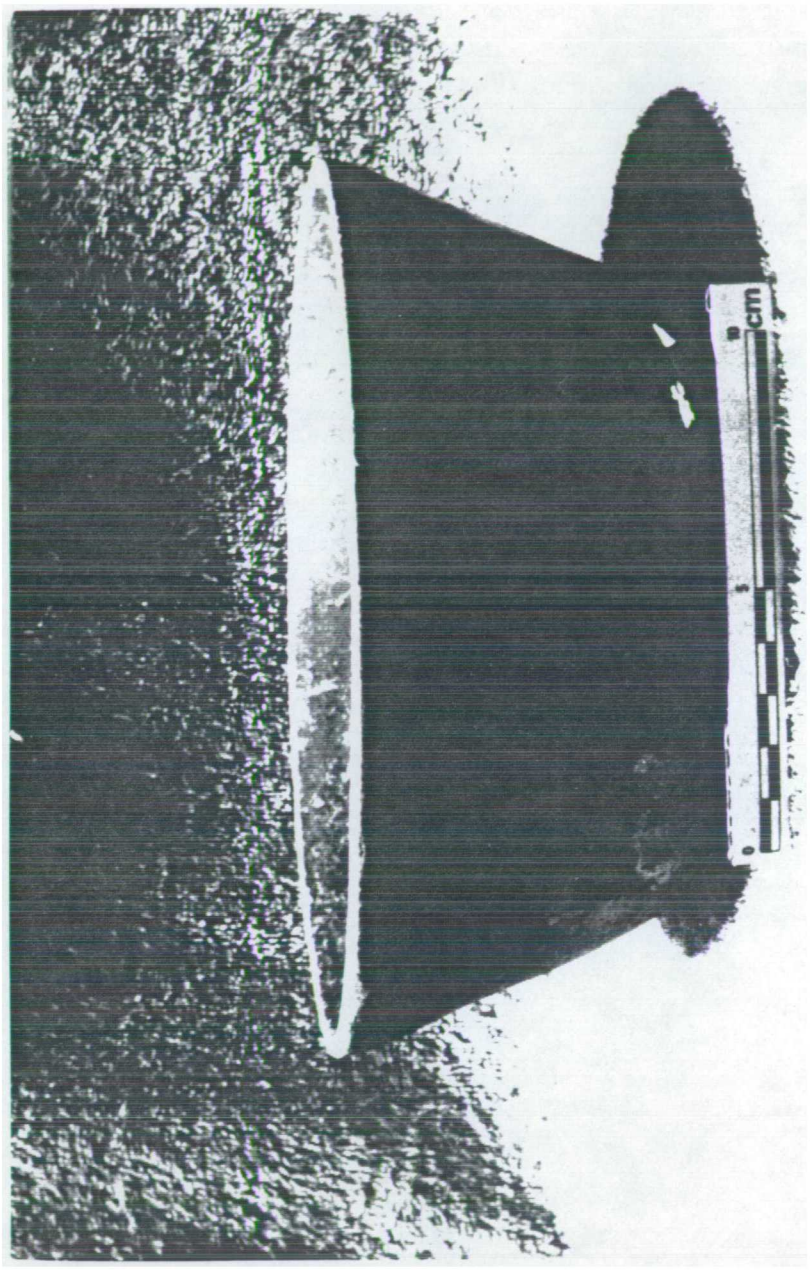


Figure III 46 Dolphin Head Red Dolphin Head Variety bowl from Burial A1-B/2 (A1-SF 26)

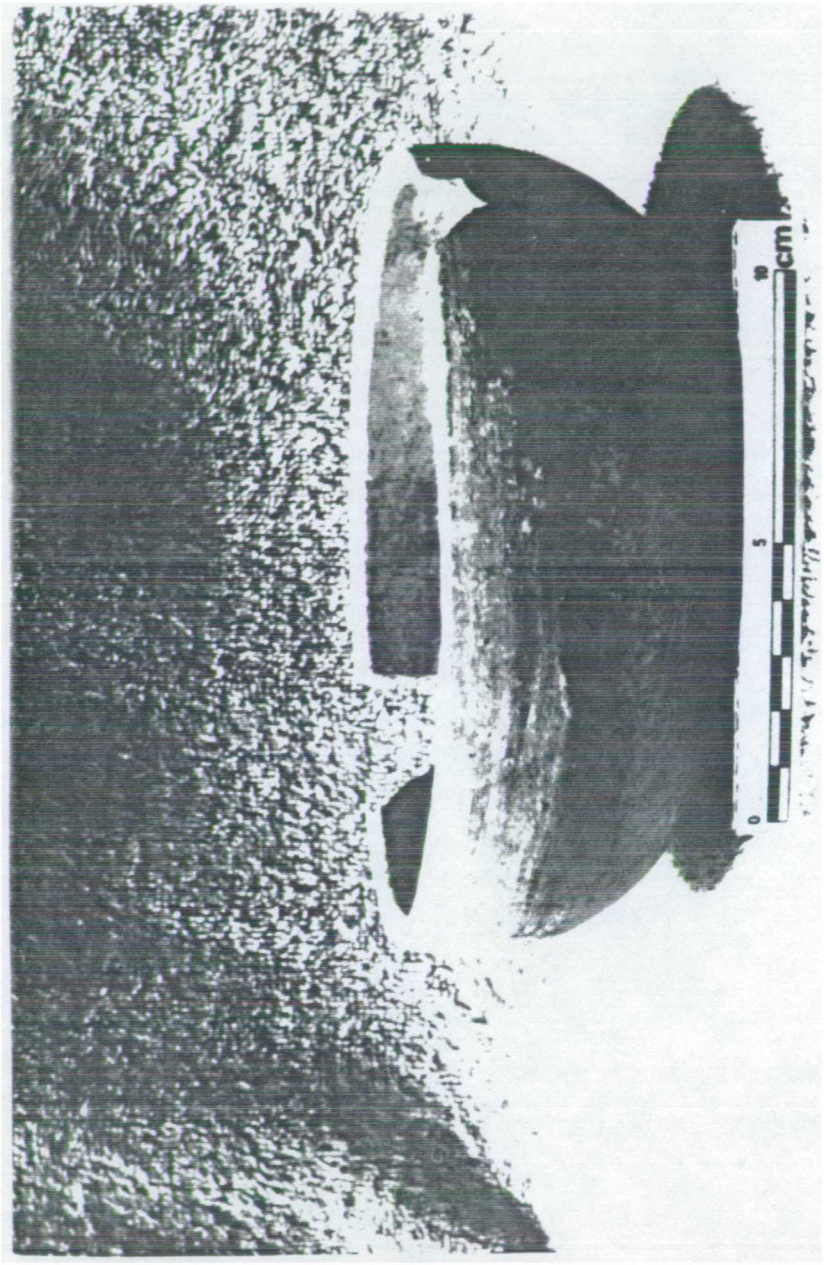


Figure III 47 Dolphin Head Red Dolphin Head Variety bowl from Burial A1-B 2 (A1-SF 28)

Figure III 48 Saxche Orange-Polychrome Variety Unspecified bowl from Burial A1-B 2 (A1-SF 27)

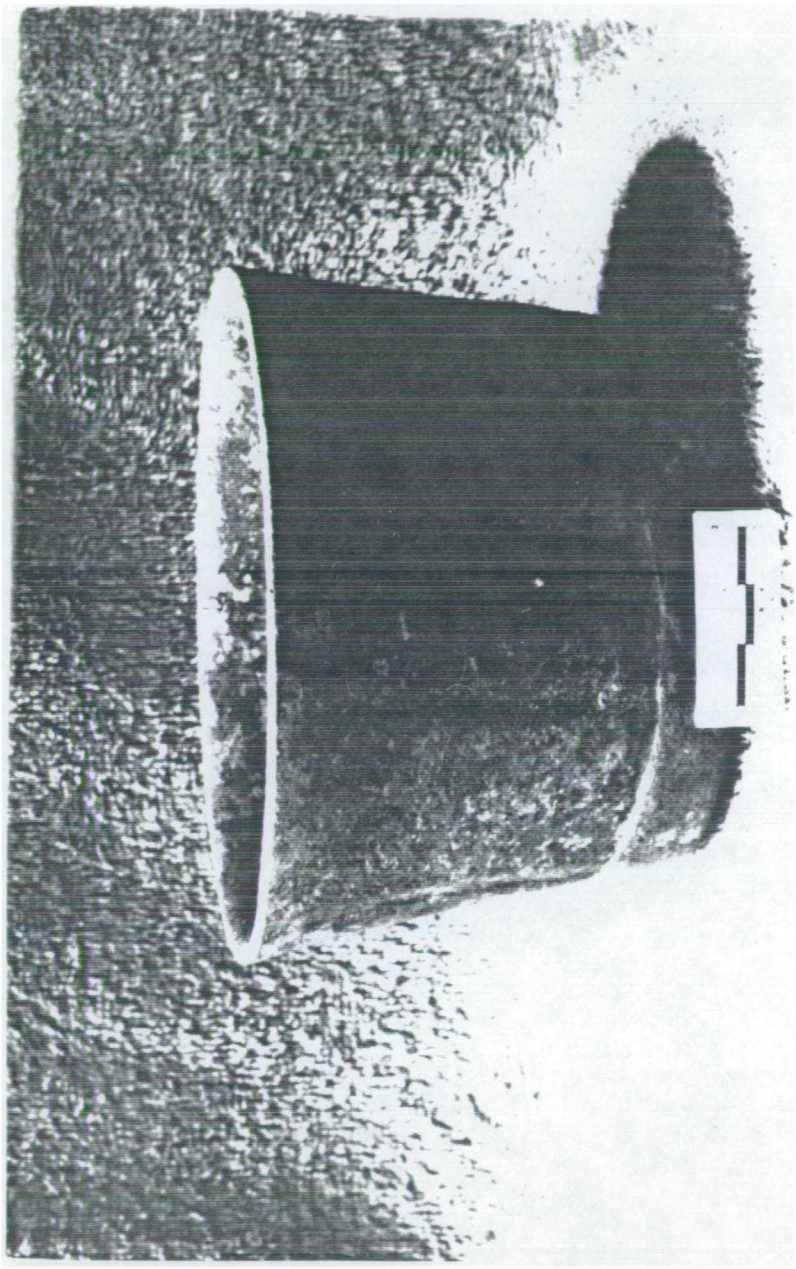


Figure III 49 Orange-Walk Incised Orange-Walk Variety bowl from Burial A1-B 1 (A1-SF 22)

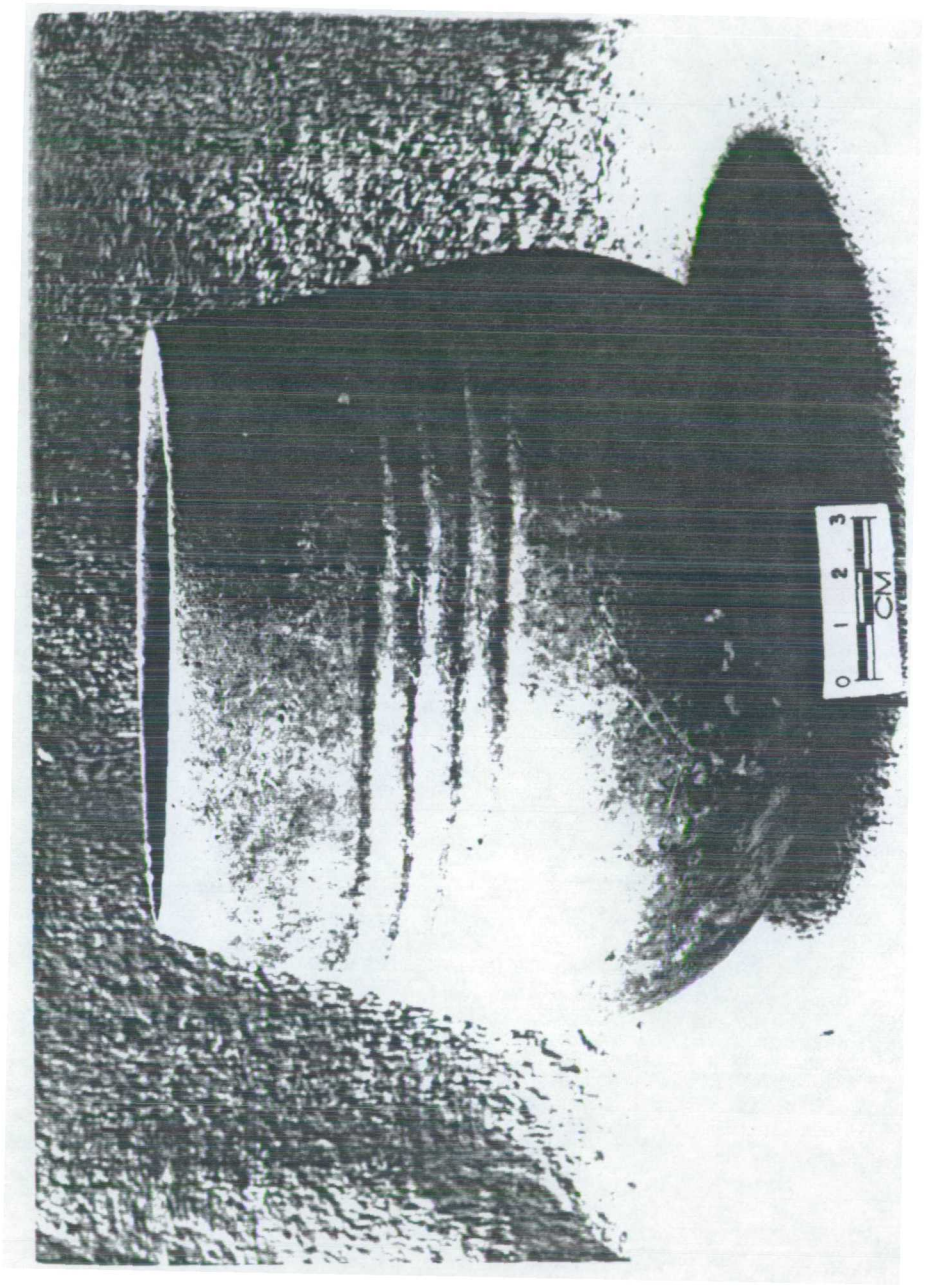


Figure III 50 Orange-Walk Incised Orange-Walk Variety bowl from Burial A1-B 1 (A1-SF 23)

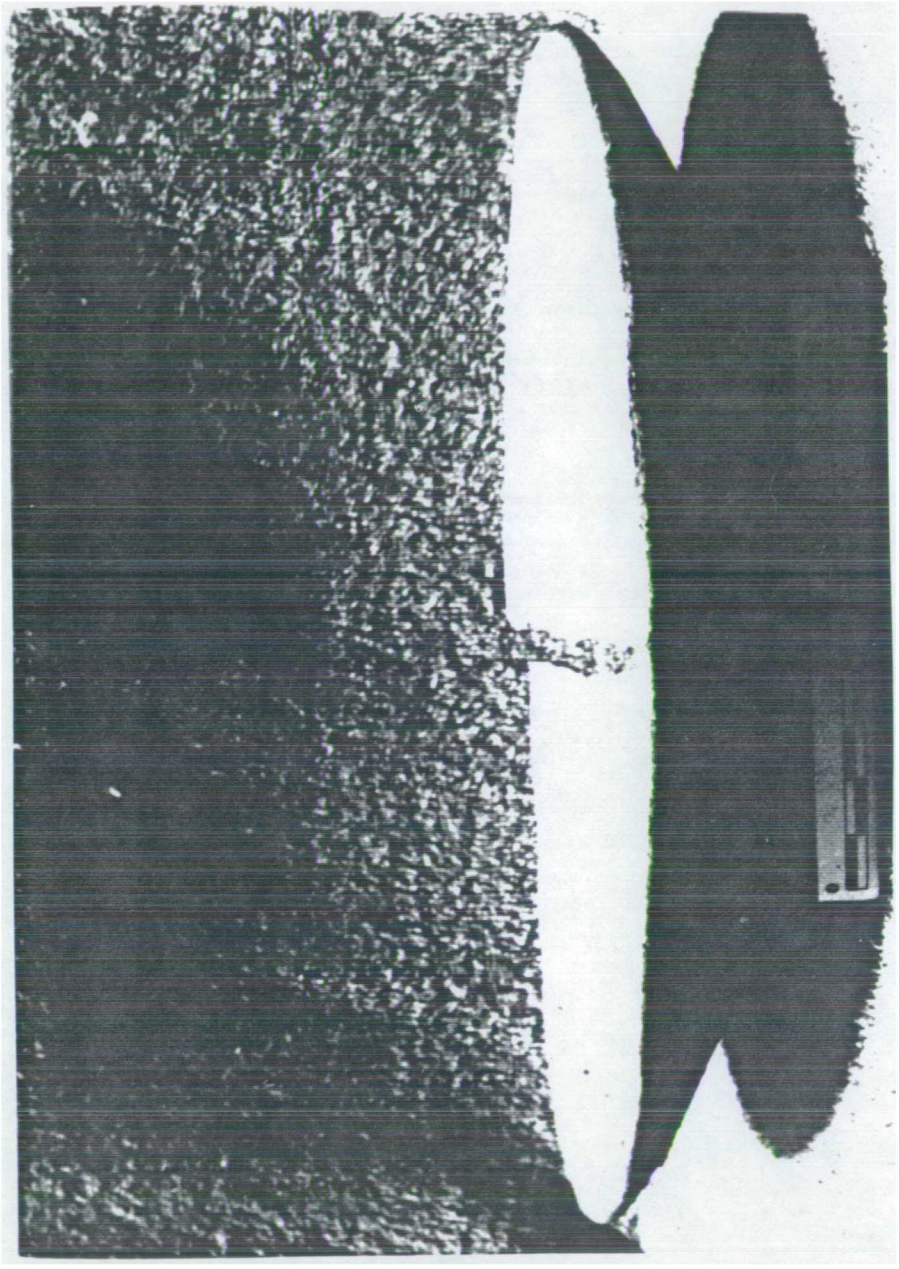


Figure III 51 Dolphin Head Red Dolphin Head Variety dish from Burial A1-B 1 (A1-SF 24)

Table III.16. Zubin worked faunal assemblage by phase and raw material type.

	AVES	MAMMALIA	SHELL	TOTAL	PERCENTAGE
LATE KANLUK	0	0	7	7	13 21
EARLY XAKAL	0	0	3	3	5 66
LATE XAKAL	2	1	11	14	26.42
FORMATIVE	0	0	1	1	1.89
XNIPEK	2	0	1	3	5 66
EARLY MAXIK	0	4	17	21	39 62
LATE MAXIK	0	0	4	4	7.55
TOTAL	4	5	44	53	
PERCENTAGE	7 55	9 43	83.02		100%

Figure III.52 Zubin worked faunal assemblage
by raw material type

Figure III.53. Zubin worked faunal assemblage
by phase

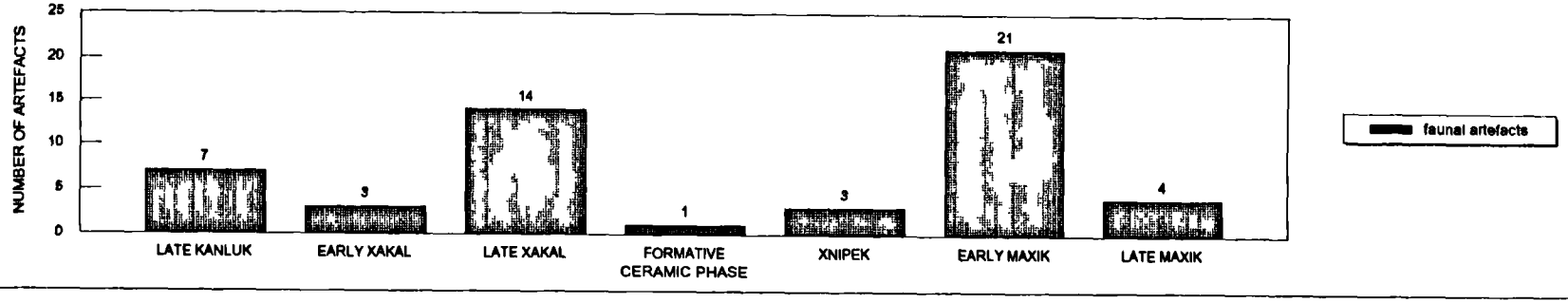


Figure III 54. Zubin worked faunal assemblage
by phase and raw material

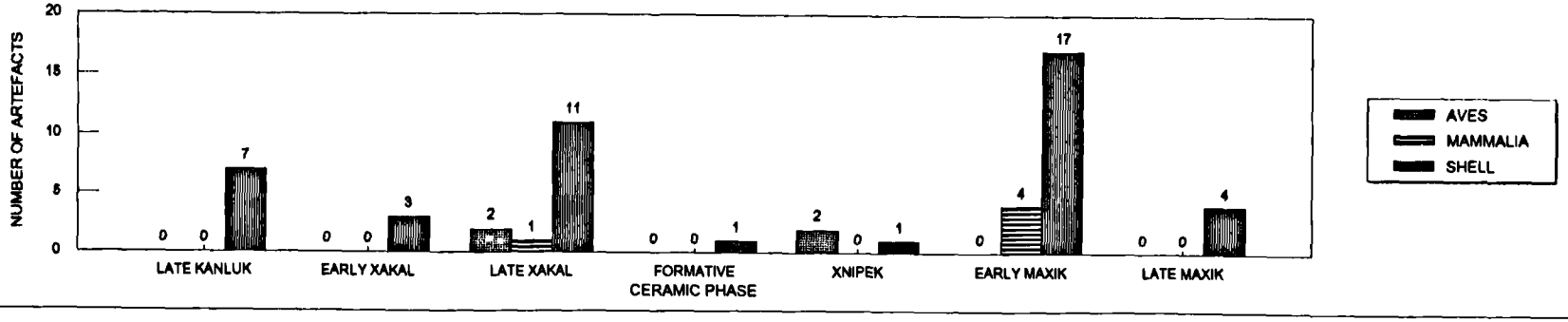
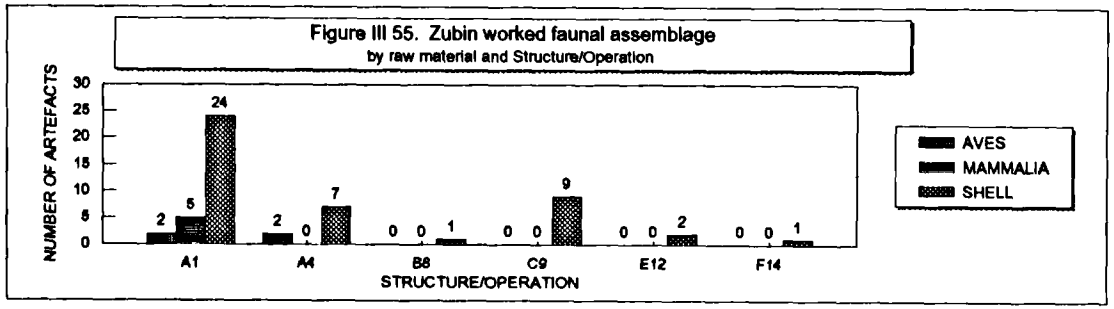


Table III.17. Zubin worked faunal assemblage by raw material and Structure/Operation.

	A1	A4	B8	C9	E12	F14	TOTAL	PERCENTAGE
AVES	2	2	0	0	0	0	4	7.55
MAMMALIA	5	0	0	0	0	0	5	9.43
SHELL	24	7	1	9	2	1	44	83.02
TOTAL	31	9	1	9	2	1	53	
PERCENTAGE	58 49	16.98	1.89	16.98	3.77	1.89		100%



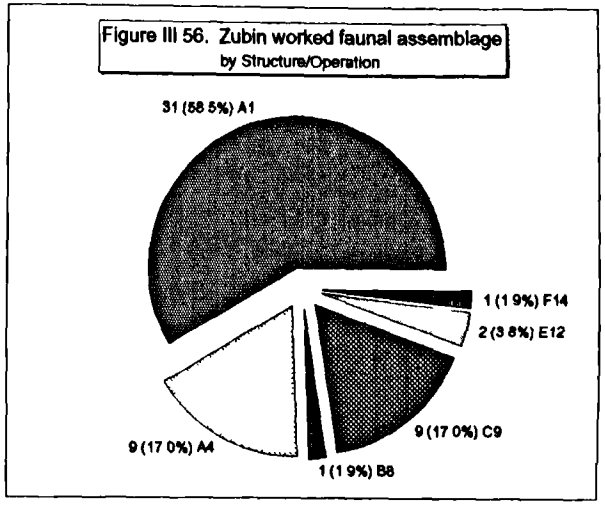
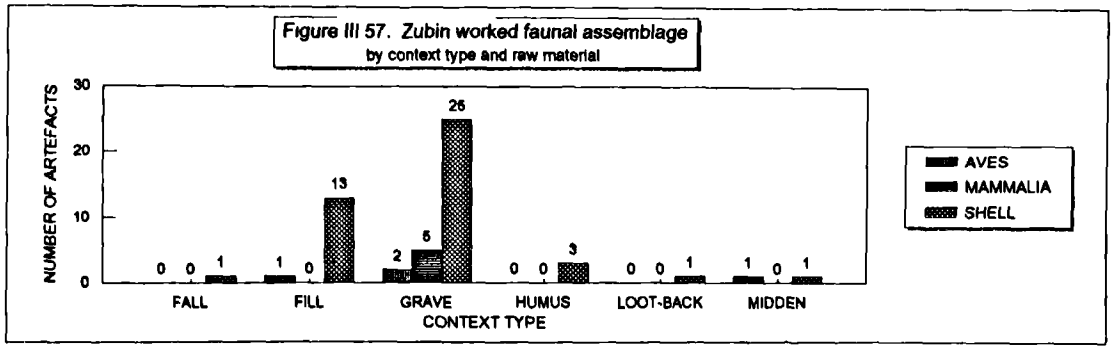


Table III.18. Zubin worked faunal assemblage by raw material and context type.

	FALL	FILL	GRAVE	HUMUS	LOOT-BACK	MIDDEN	TOTAL	PERCENTAGE
AVES	0	1	2	0	0	1	4	7.55
MAMMALIA	0	0	5	0	0	0	5	9 43
SHELL	1	13	25	3	1	1	44	83.02
TOTAL	1	14	32	3	1	2	53	
PERCENTAGE	1 89	26.42	60.38	5.66	1.89	3.77		100%

NOTE: LOOT BACK - LOOTER'S BACKDIRT.



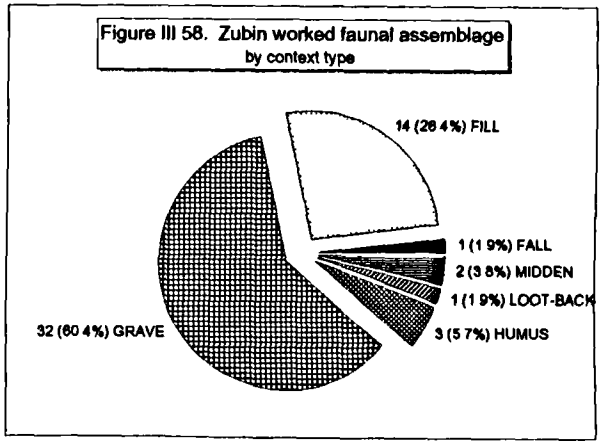
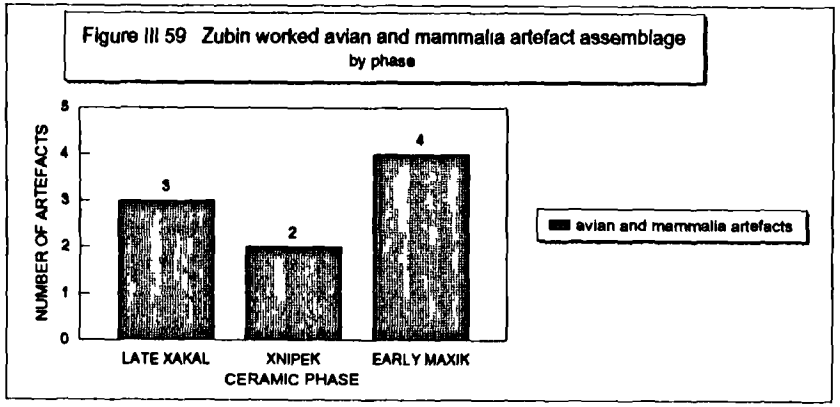
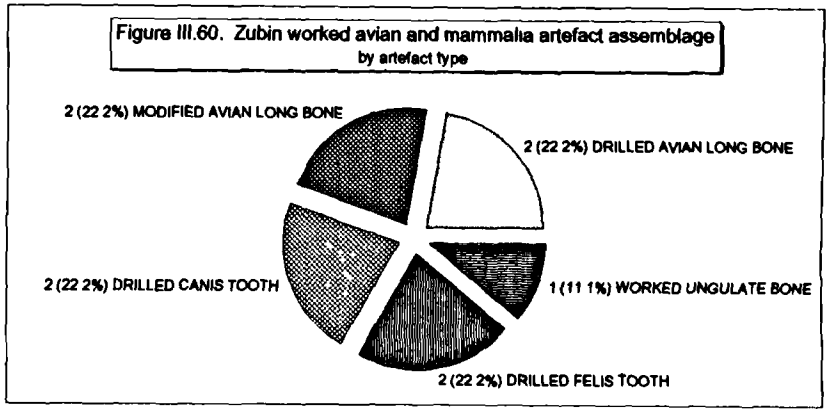


Table III.19. Zubin worked avian and mammalia artefact assemblage by phase and artefact type.

	LATE XAKAL	XNIPEK	EARLY MAXIK	TOTAL	PERCENTAGE
DRILLED AVIAN LONG BONE	1	1	0	2	22 22
MODIFIED AVIAN LONG BONE	1	1	0	2	22 22
DRILLED CANIS TOOTH	0	0	2	2	22 22
DRILLED FELIS TOOTH	0	0	2	2	22 22
WORKED UNGULATE BONE	1	0	0	1	11.11
TOTAL	3	2	4	9	
PERCENTAGE	33 33	22 22	44 44		100%





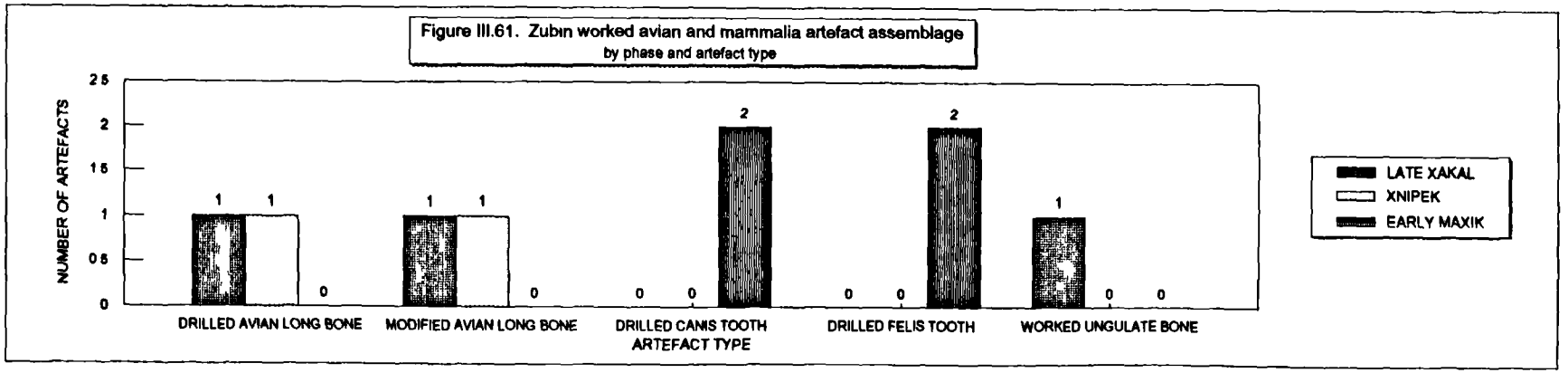


Table III 20. Zubin worked avian and mammalia artefact assemblage by artefact type and Structure/Operation.

	A1	A4	TOTAL	PERCENTAGE
DRILLED AVIAN LONG BONE	1	1	2	22.22
MODIFIED AVIAN LONG BONE	1	1	2	22 22
DRILLED CANIS TOOTH	2	0	2	22 22
DRILLED FELIS TOOTH	2	0	2	22.22
WORKED UNGULATE BONE	1	0	1	11.11
TOTAL	7	2	9	
PERCENTAGE	77.78	22.22		100%

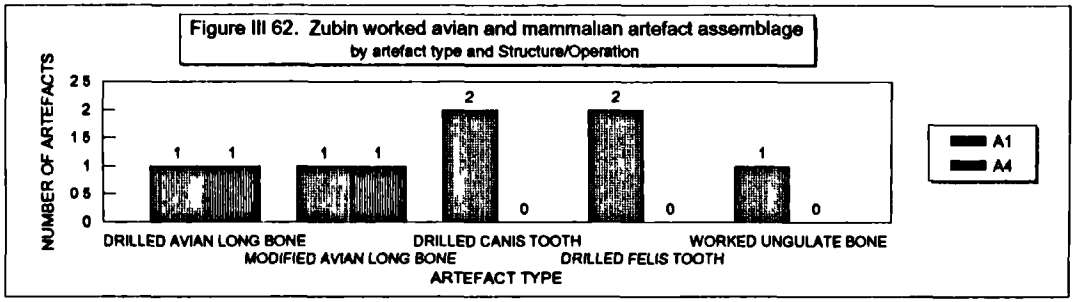
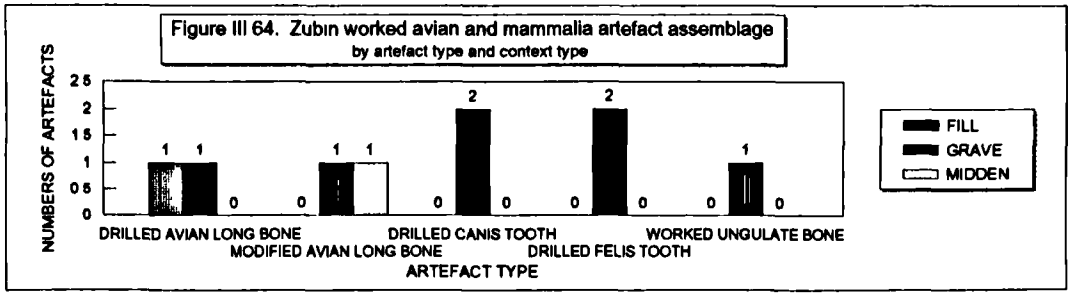
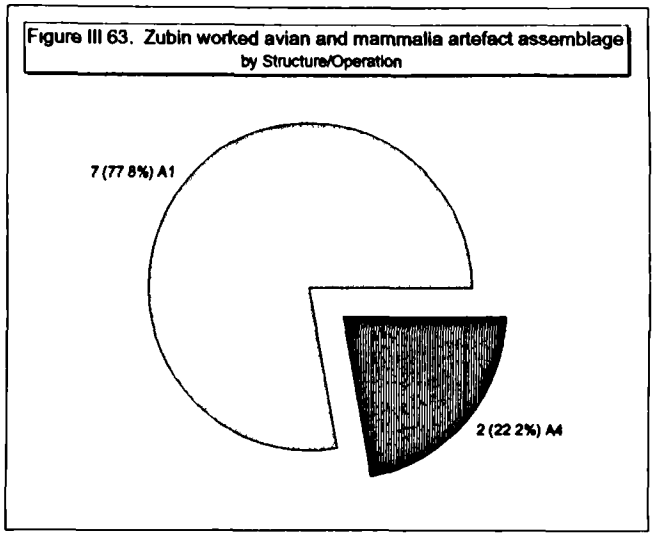


Table III.21. Zubin worked avian and mammalia artefact assemblage by artefact type and context type.

	FILL	GRAVE	MIDDEN	TOTAL	PERCENTAGE
DRILLED AVIAN LONG BONE	1	1	0	2	22 22
MODIFIED AVIAN LONG BONE	0	1	1	2	22.22
DRILLED CANIS TOOTH	0	2	0	2	22.22
DRILLED FELIS TOOTH	0	2	0	2	22.22
WORKED UNGULATE BONE	0	1	0	1	11.11
TOTAL	1	7	1	9	
PERCENTAGE	11 11	77.78	11.11		100%





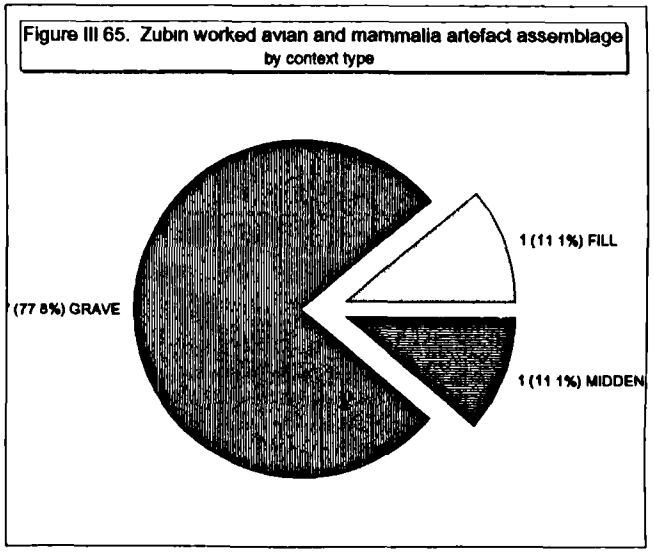
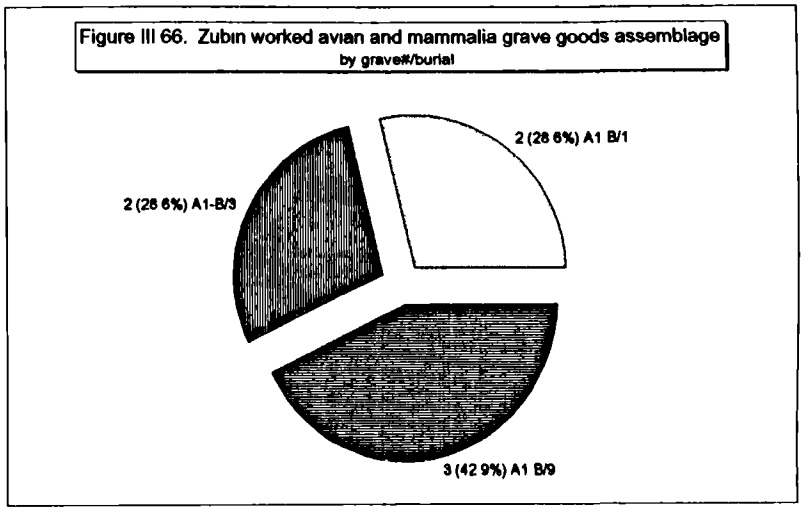
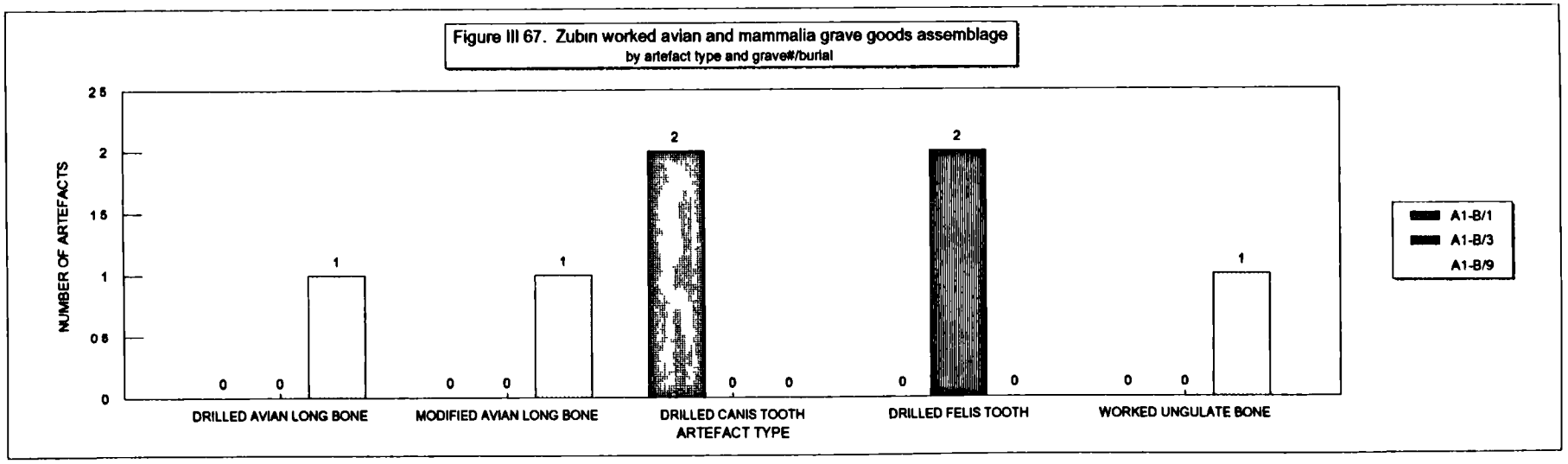


Table III.22. Zubin worked avain and mammalia grave goods assemblage by grave#/burial.

	A1 B/1	A1 B/3	A1-B/9	TOTAL	PERCENTAGE
DRILLED AVIAN LONG BONE	0	0	1	1	14.29
MODIFIED AVIAN LONG BONE	0	0	1	1	14.29
DRILLED CANIS TOOTH	2	0	0	2	28 57
DRILLED FELIS TOOTH	0	2	0	2	28 57
WORKED UNGULATE BONE	0	0	1	1	14.29
TOTAL	2	2	3	7	
PERCENTAGE	28 57	28 57	42.86		100%





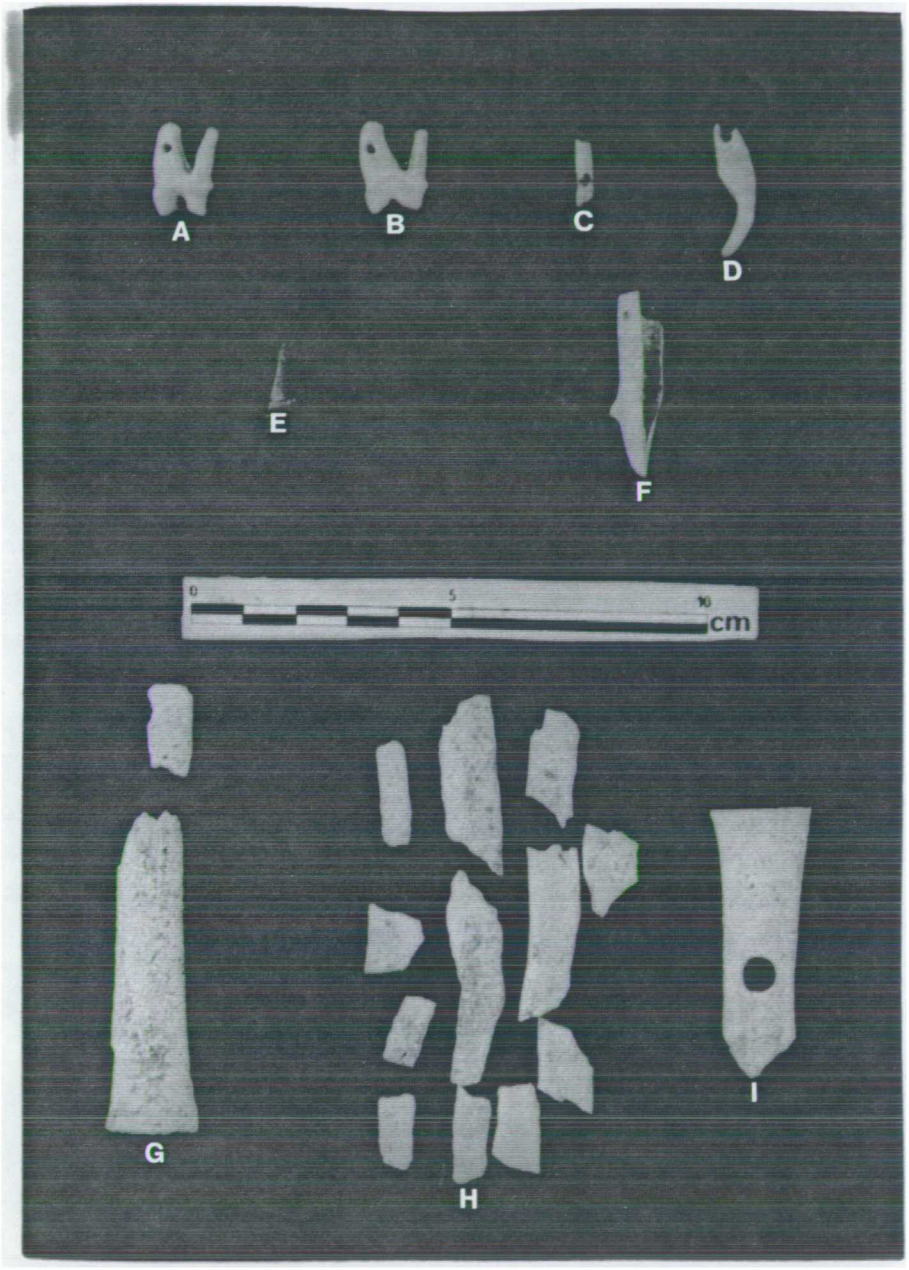


Figure III 68 Zubin worked avian and mammalia artefacts (a) drilled felis tooth (A1-SF 38), (b) drilled felis tooth (A1-SF 37), (c) drilled canis tooth (A1-SF 19); (d) drilled canis tooth (A1-SF 20), (e) modified avian long bone (A4-SF 46), (f) drilled avian long bone (A4-SF 47), (g) worked ungulate bone (A1-SF 226), (h) modified avian long bone (A1-SF 227); (i) drilled avian long bone (A1-SF 44)

Table III.23. Zubin worked shell artefact assemblage by phase and raw material.

	FRESHWATER	MARINE	UNKNOWN	TOTAL	PERCENTAGE
LATE KANLUK	0	7	0	7	15.91
EARLY XAKAL	0	1	2	3	6.82
LATE XAKAL	2	9	0	11	25.00
FORMATIVE	0	1	0	1	2.27
XNIPEK	0	1	0	1	2.27
EARLY MAXIK	1	16	0	17	38.64
LATE MAXIK	1	3	0	4	9.09
TOTAL	4	38	2	44	
PERCENTAGE	9 09	86 36	4.55		100%

Figure III.69. Zubin worked shell artefact assemblage
by raw material type

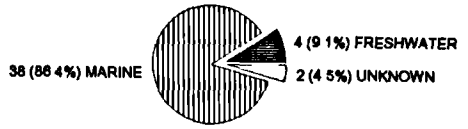


Figure III.70. Zubin worked shell artefact assemblage
by phase

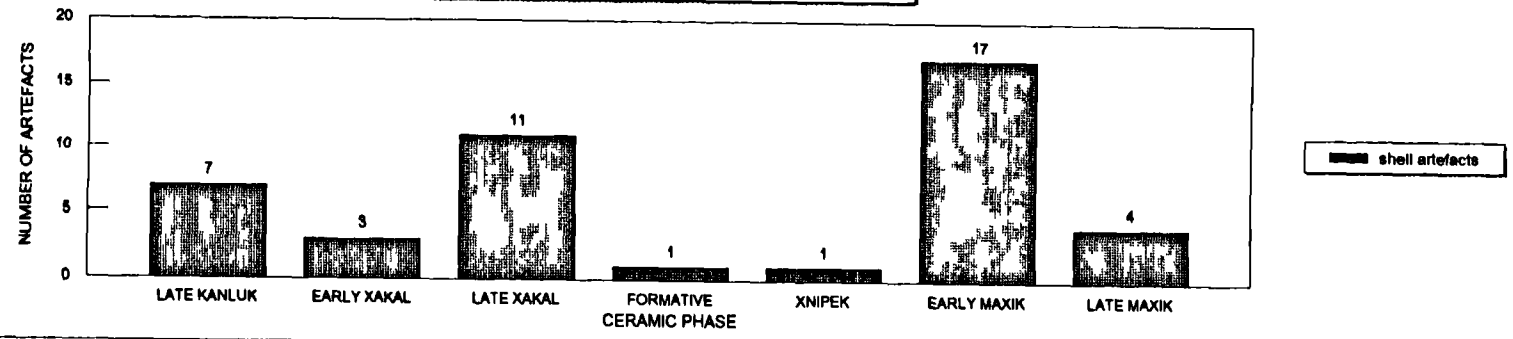


Figure III.71. Zubin worked shell artefact assemblage
by phase and raw material

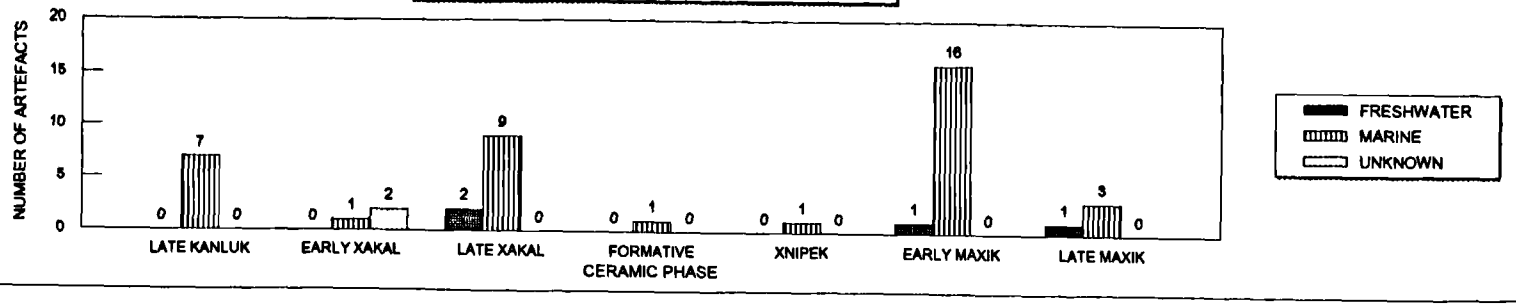
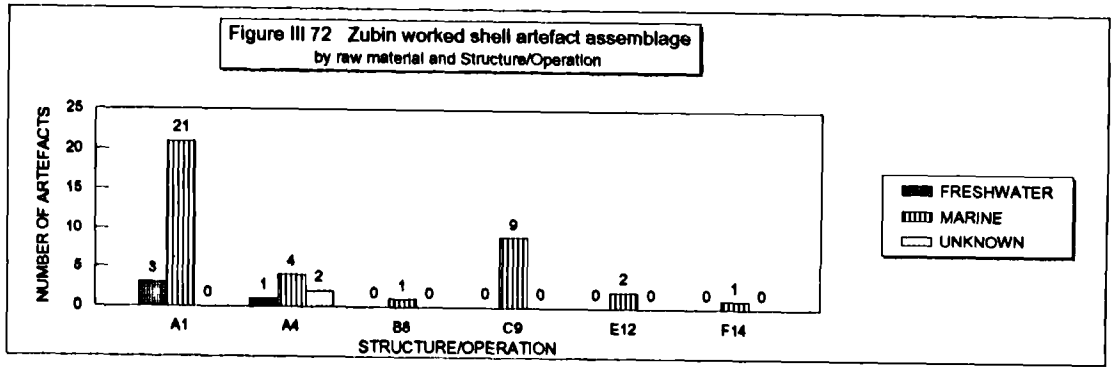
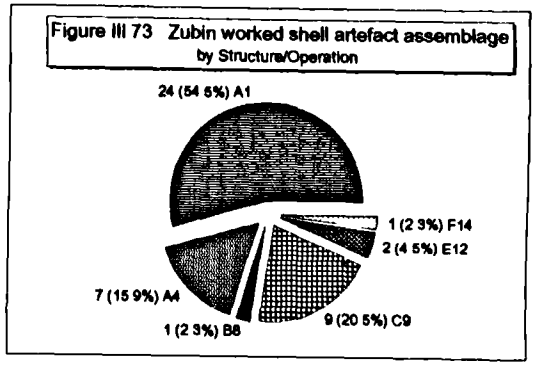


Table III.24. Zubin worked shell artefact assemblage by Structure/Operation.

	A1	A4	B8	C9	E12	F14	TOTAL	PERCENTAGE
FRESHWATER	3	1	0	0	0	0	4	9 09
MARINE	21	4	1	9	2	1	38	86 36
UNKNOWN	0	2	0	0	0	0	2	4.55
TOTAL	24	7	1	9	2	1	44	
PERCENTAGE	54.55	15 91	2 27	20.45	4.55	2.27		100%

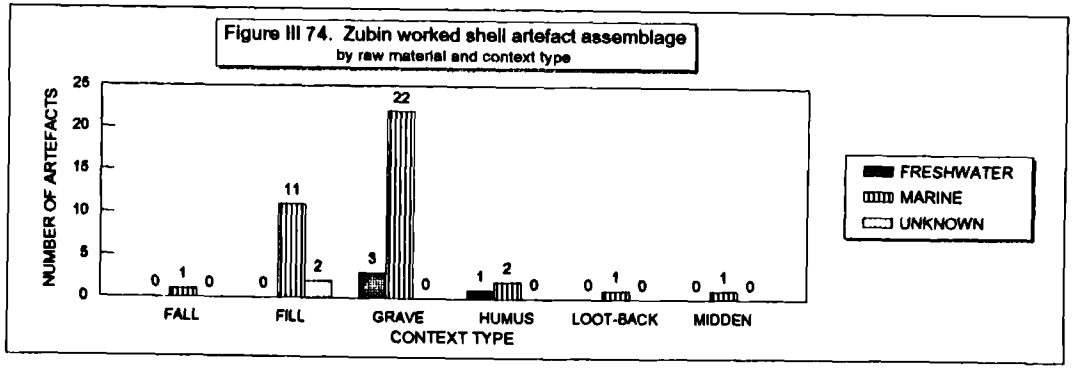




TableIII.25. Zubin worked shell artefact assemblage by raw material and context type.

	FALL	FILL	GRAVE	HUMUS	LOOT-BACK	MIDDEN	TOTAL	PERCENTAGE
FRESHWATER	0	0	3	1	0	0	4	9.09
MARINE	1	11	22	2	1	1	38	86.36
UNKNOWN	0	2	0	0	0	0	2	4.55
TOTAL	1	13	25	3	1	1	44	
PERCENTAGE	2.27	29 55	56 82	6 82	2.27	2 27		100%

NOTE: LOOT BACK = LOOTER'S BACKDIRT.



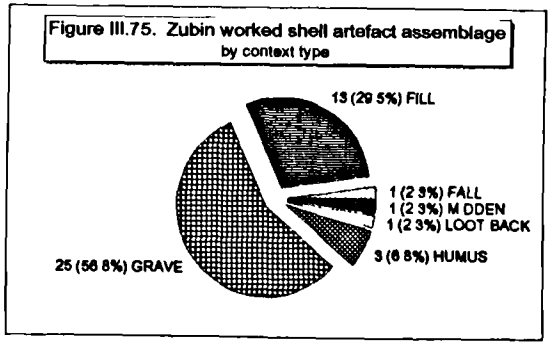
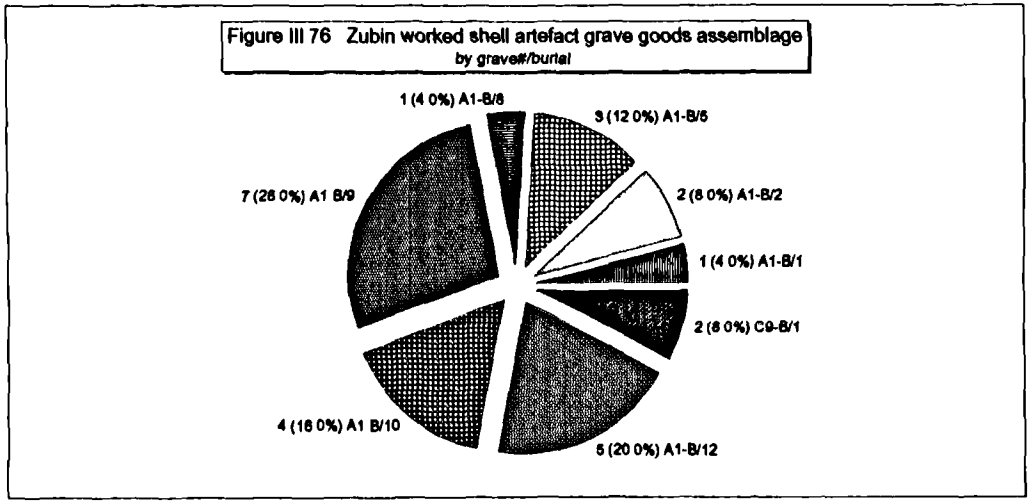


Table III.26. Zubin worked shell artefact grave goods assemblage by raw material and grave#/burial.

	A1 B/1	A1 B/2	A1 B/5	A1 B/8	A1 B/9	A1-B/10	A1-B/12	C9-B/1	TOTAL	PERCENTAGE
FRESHWATER	0	0	0	0	2	0	1	0	3	12 00
MARINE	1	2	3	1	5	4	4	2	22	88 00
UNKNOWN	0	0	0	0	0	0	0	0	0	0 00
TOTAL	1	2	3	1	7	4	5	2	25	
PERCENTAGE	4 00	8 00	12 00	4.00	28.00	16 00	20.00	8.00		100%



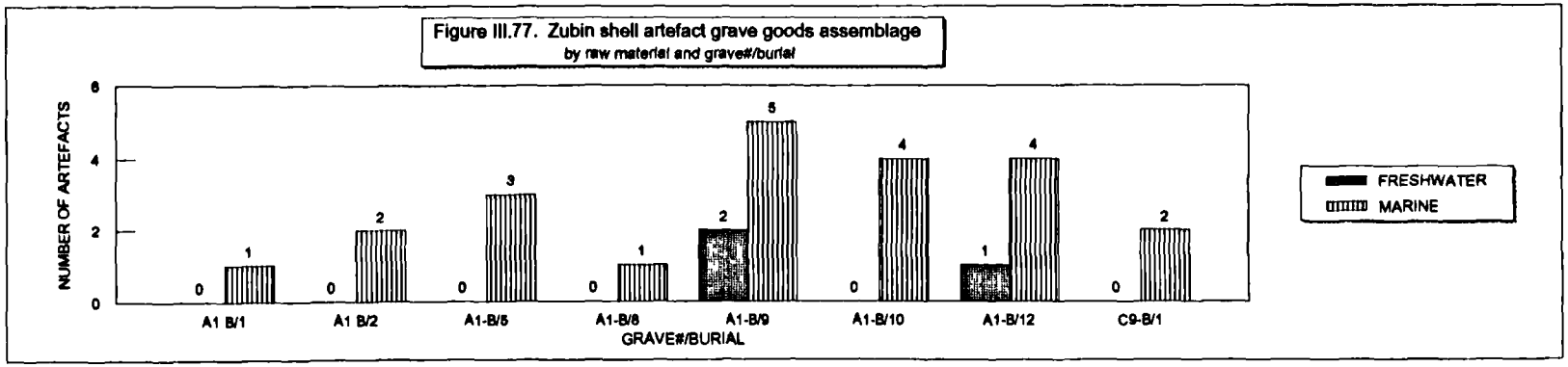
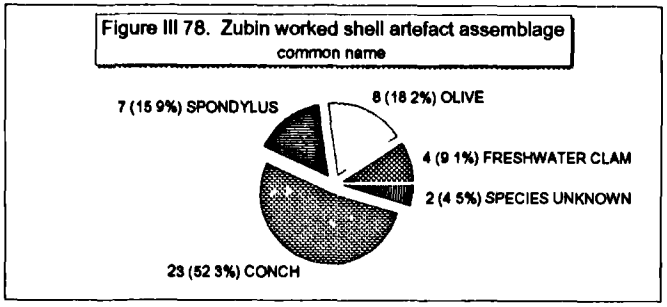


Table III.27. Zubin worked shell artefact assemblage by common name and phase.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	XNIPEK	EARLY MAXIK	LATE MAXIK	TOTAL	PERCENTAGE
FRESHWATER CLAM	0	0	2	0	0	1	1	4	9 09
OLIVE	0	0	4	0	0	4	0	8	18 18
SPONDYLUS	0	0	0	0	0	7	0	7	15 91
CONCH	7	1	5	1	1	5	3	23	52 27
SPECIES UNKNOWN	0	2	0	0	0	0	0	2	4 55
TOTAL	7	3	11	1	1	17	4	44	
PERCENTAGE	15.91	6 82	25.00	2.27	2.27	38.64	9.09		100%



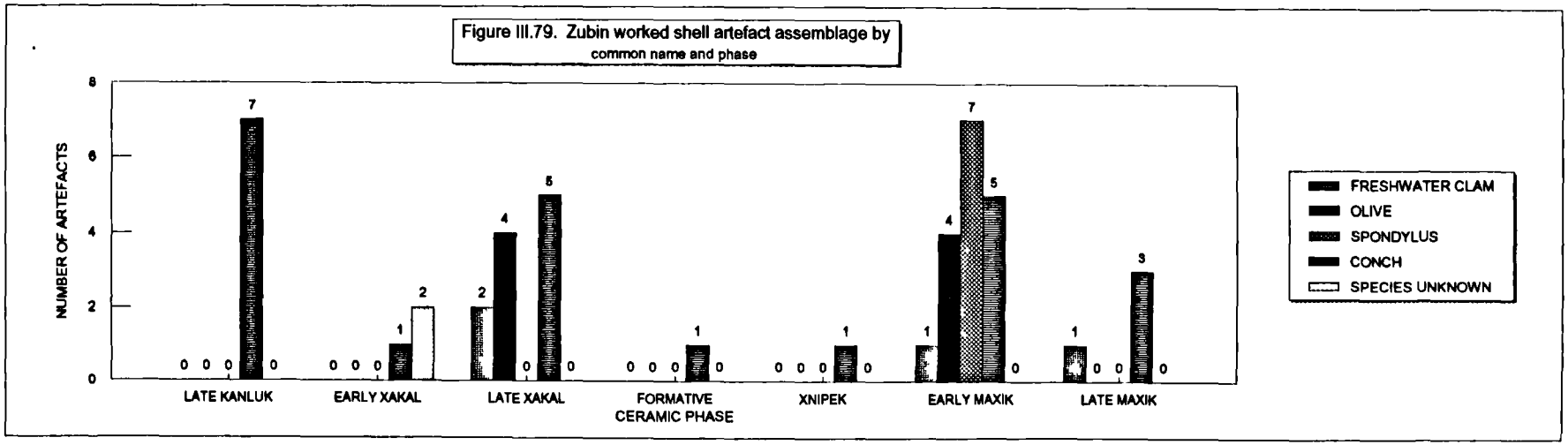


Table III.28. Zubin worked shell artefact assemblage by common name and Structure/Operation.

	A1	A4	B8	C9	E12	F14	TOTAL	PERCENTAGE
FRESHWATER CLAM	3	1	0	0	0	0	4	9 09
OLIVE	4	2	0	0	2	0	8	18.18
SPECIES UNKNOWN	0	2	0	0	0	0	2	4 55
SPONDYLUS	7	0	0	0	0	0	7	15 91
CONCH	10	2	1	9	0	1	23	52.27
TOTAL	24	7	1	9	2	1	44	
PERCENTAGE	54.55	15.91	2.27	20.45	4.55	2.27		100%

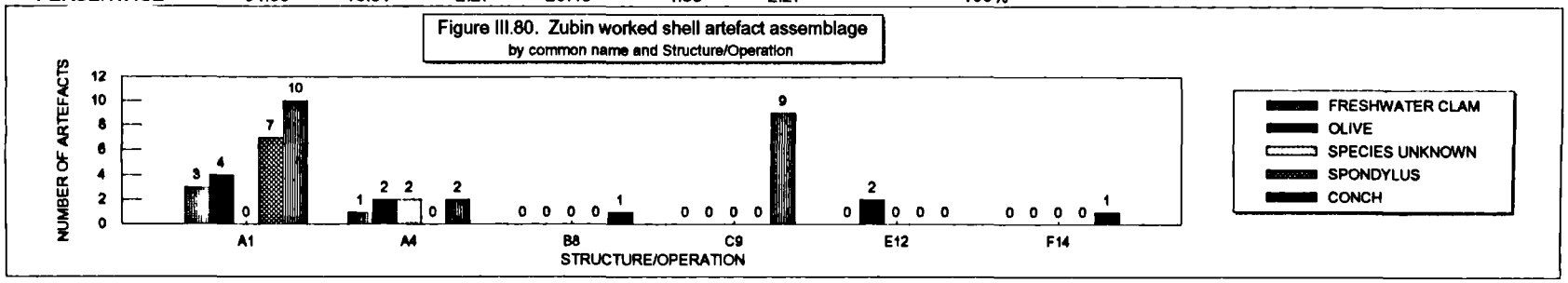


Table III.29. Zubin shell artefact assemblage by common name and context type.

	FALL	FILL	GRAVE	HUMUS	LOOT-BACK	MIDDEN	TOTAL	PERCENTAGE
FRESHWATER CLAM	0	0	3	1	0	0	4	9.09
OLIVE	0	4	4	0	0	0	8	18.18
SPECIES UNKNOWN	0	2	0	0	0	0	2	4.55
SPONDYLUS	0	0	7	0	0	0	7	15.91
CONCH	1	7	11	2	1	1	23	52.27
TOTAL	1	13	25	3	1	1	44	
PERCENTAGE	2 27	29 55	56 82	6 82	2.27	2.27		100%

NOTE: LOOT BACK = LOOTER'S BACKDIRT

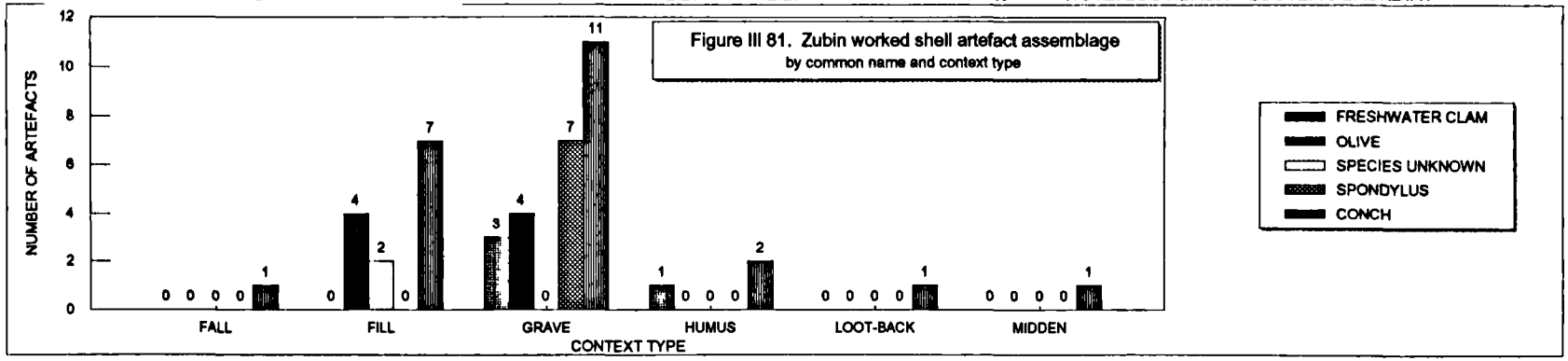


Table III.30. Zubin worked shell artefact grave good assemblage by common name and grave#/burial.

	FRESHWATER CLAM	OLIVE	SPONDYLUS	CONCH	TOTAL	PERCENTAGE
A1 B/1	0	0	1	0	1	4.00
A1 B/2	0	0	2	0	2	8.00
A1 B/5	0	0	3	0	3	12.00
A1 B/8	0	0	1	0	1	4.00
A1 B/9	2	0	0	5	7	28.00
A1 B/10	0	4	0	0	4	16.00
A1-B/12	1	0	0	4	5	20.00
C9 B/1	0	0	0	2	2	8.00
TOTAL	3	4	7	11	25	
PERCENTAGE	12.00	16.00	28.00	44.00		100%

Figure III.82. Zubin worked shell grave goods assemblage by common name and grave#/burial

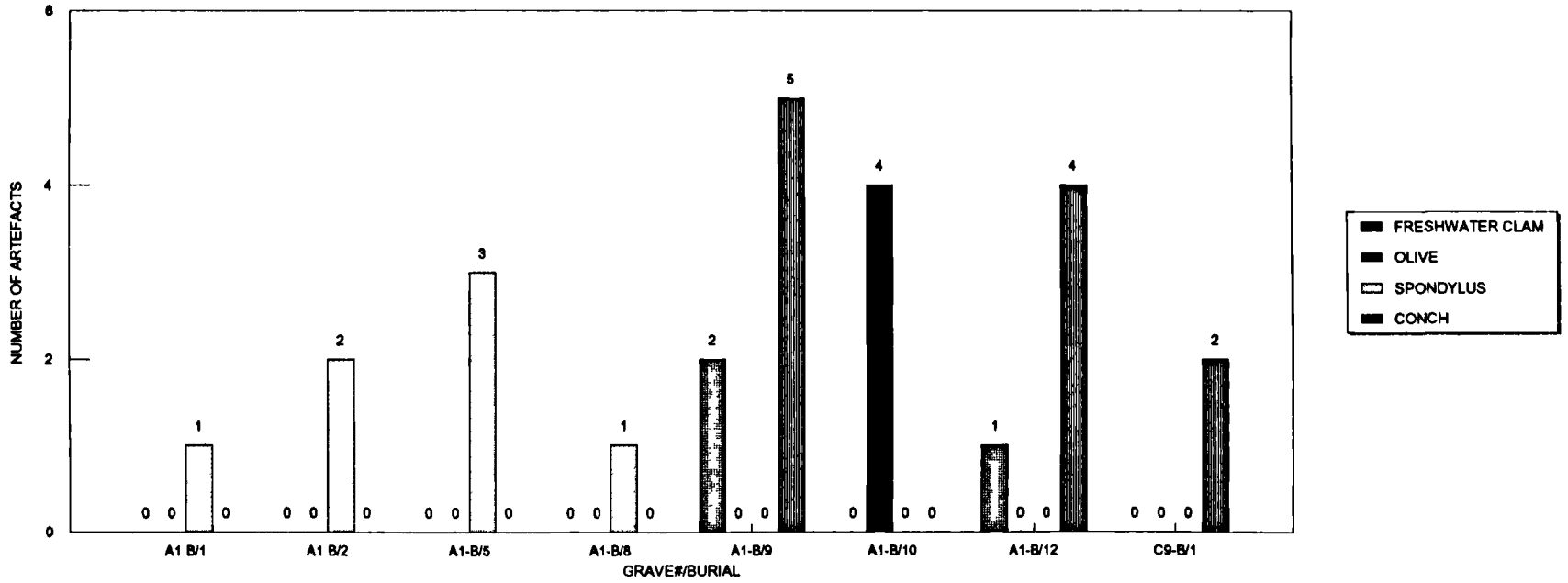
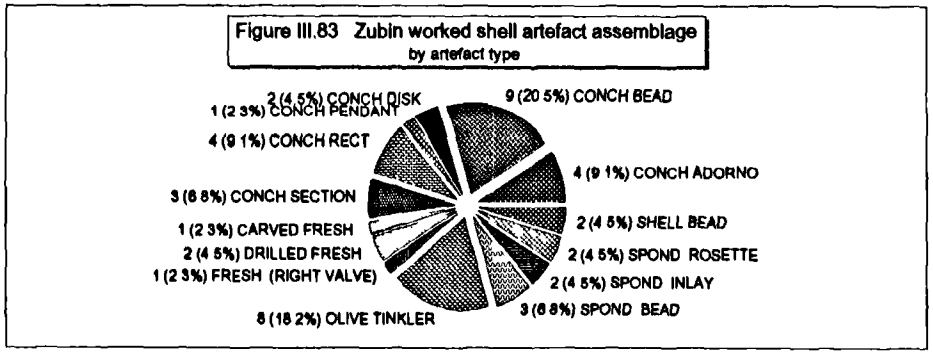


Table III.31. Zubin worked shell artefact assemblage by artefact type and phase.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	XNIPEK	EARLY MAXIK	LATE MAXIK	TOTAL	PERCENTAGE
CONCH ADORNO	0	0	0	0	0	3	1	4	9 09
CONCH BEAD	7	1	0	1	0	0	0	9	20 45
CONCH DISK	0	0	0	0	0	2	0	2	4 55
CONCH PENDANT	0	0	0	0	1	0	0	1	2 27
CONCH RECT	0	0	4	0	0	0	0	4	9 09
CONCH SECTION	0	0	1	0	0	0	2	3	6 82
CARVED FRESH	0	0	0	0	0	0	1	1	2 27
DRILLED FRESH	0	0	1	0	0	1	0	2	4 55
FRESH (RIGHT VALVE)	0	0	1	0	0	0	0	1	2 27
OLIVE TINKLER	0	0	4	0	0	4	0	8	18 18
SPOND BEAD	0	0	0	0	0	3	0	3	6 82
SPOND INLAY	0	0	0	0	0	2	0	2	4 55
SPOND ROSETTE	0	0	0	0	0	2	0	2	4 55
SHELL BEAD	0	2	0	0	0	0	0	2	4 55
TOTAL	7	3	11	1	1	17	4	44	
PERCENTAGE	15 91	6 82	25 00	2 27	2 27	38 64	9 09		100%

NOTE RECT = RECTANGULATE FRESH = FRESHWATER CLAM SPOND = SPONDYLUS



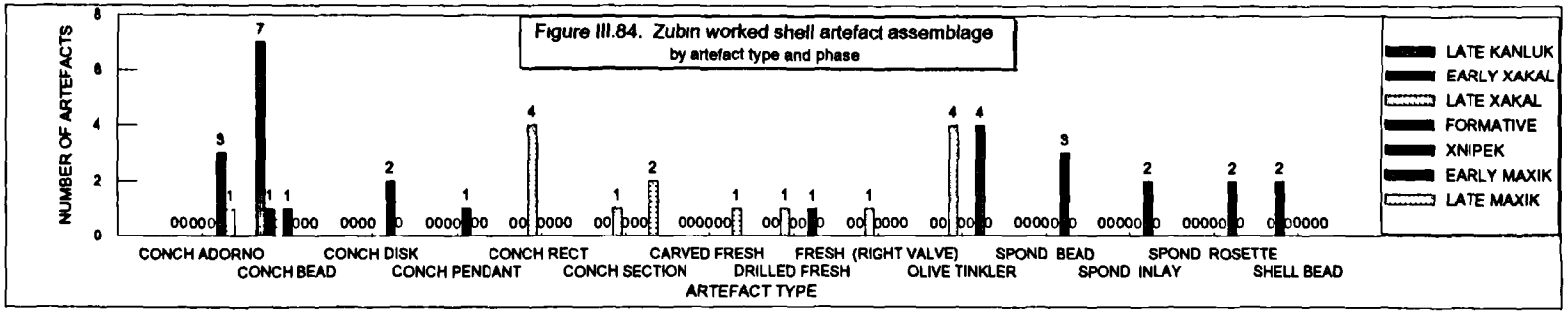


Table III.32. Zubin worked shell artefact assemblage by artefact type and Structure/Operation.

	A1	A4	B8	C9	E12	F14	TOTAL	PERCENTAGE
CONCH ADORNO	3	1	0	0	0	0	4	9.09
CONCH BEAD	0	0	0	9	0	0	9	20 45
CONCH DISK	2	0	0	0	0	0	2	4.55
CONCH PENDANT	0	1	0	0	0	0	1	2 27
CONCH RECT	4	0	0	0	0	0	4	9.09
CONCH SECTION	1	0	1	0	0	1	3	6 82
CARVED FRESH.	0	1	0	0	0	0	1	2.27
DRILLED FRESH	2	0	0	0	0	0	2	4.55
FRESH (RIGHT VALVE)	1	0	0	0	0	0	1	2 27
OLIVE TINKLER	4	2	0	0	2	0	8	18.18
SPOND BEAD	3	0	0	0	0	0	3	6 82
SPOND. INLAY	2	0	0	0	0	0	2	4.55
SPOND ROSETTE	2	0	0	0	0	0	2	4.55
SHELL BEAD	0	2	0	0	0	0	2	4.55
TOTAL	24	7	1	9	2	1	44	
PERCENTAGE	54 55	15 91	2.27	20.45	4.55	2.27		100%

NOTE RECT = RECTANGULATE FRESH = FRESHWATER CLAM SPOND = SPONDYLUS

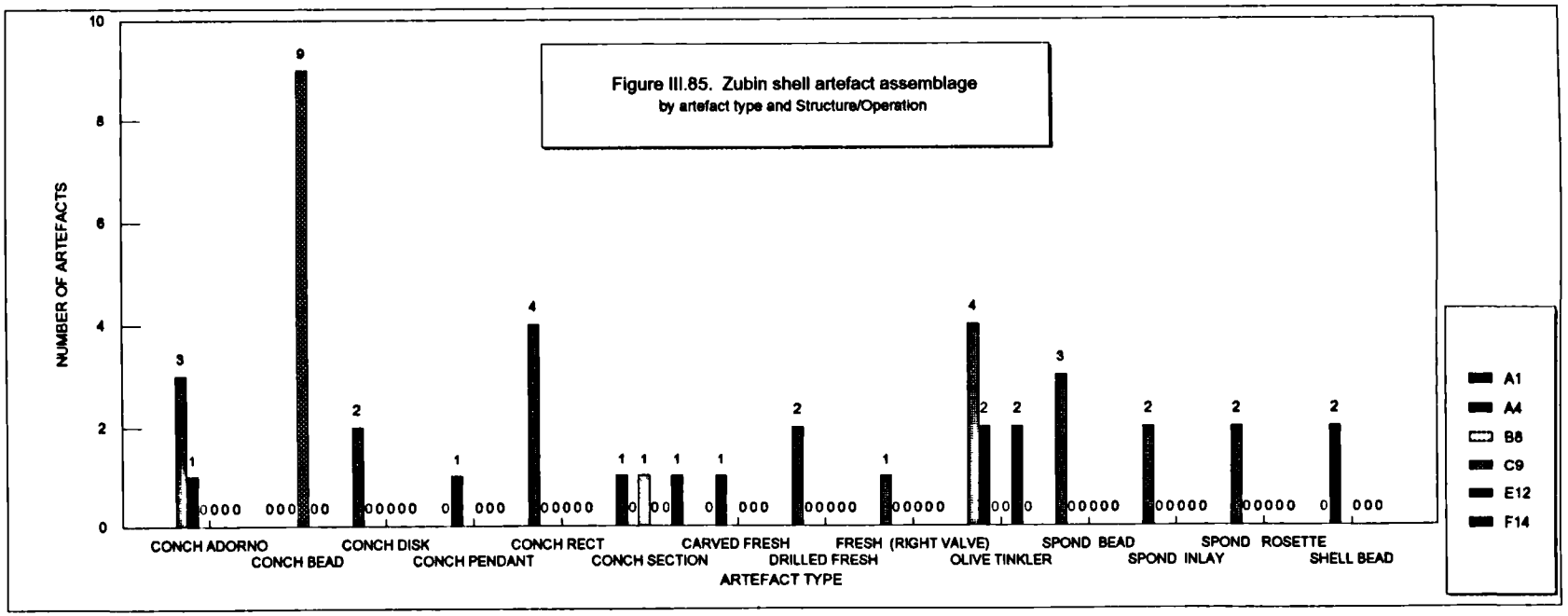


Table III.33. Zubin worked shell artefact assemblage by artefact type and context type.

	FALL	FILL	GRAVE	HUMUS	LOOT-BACK	MIDDEN	TOTAL	PERCENTAGE
CONCH ADORNO	0	1	2	1	0	0	4	9.09
CONCH BEAD	0	6	2	0	1	0	9	20 45
CONCH DISK	0	0	2	0	0	0	2	4.55
CONCH PENDANT	0	0	0	0	0	1	1	2.27
CONCH RECT	0	0	4	0	0	0	4	9 09
CONCH SECTION	1	0	1	1	0	0	3	6.82
CARVED FRESH.	0	0	0	1	0	0	1	2.27
DRILLED FRESH.	0	0	2	0	0	0	2	4.55
FRESH (RIGHT VALVE)	0	0	1	0	0	0	1	2.27
OLIVE TINKLER	0	4	4	0	0	0	8	18.18
SPOND. BEAD	0	0	3	0	0	0	3	6 82
SPOND INLAY	0	0	2	0	0	0	2	4.55
SPOND ROSETTE	0	0	2	0	0	0	2	4.55
SHELL BEAD	0	2	0	0	0	0	2	4.55
TOTAL	1	13	25	3	1	1	44	
PERCENTAGE	2.27	29.55	56.82	6.82	2.27	2.27		100%

NOTE RECT = RECTANGULATE FRESH = FRESHWATER CLAM SPOND = SPONDYLUS

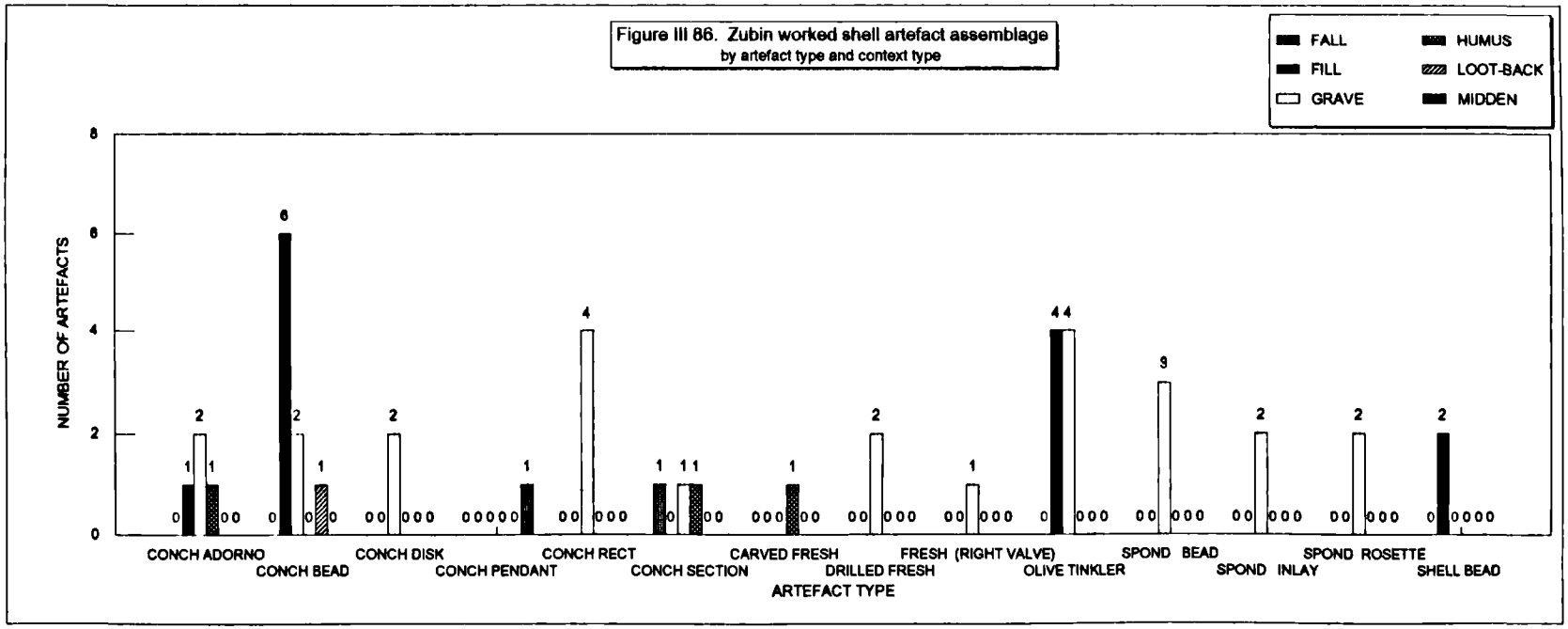
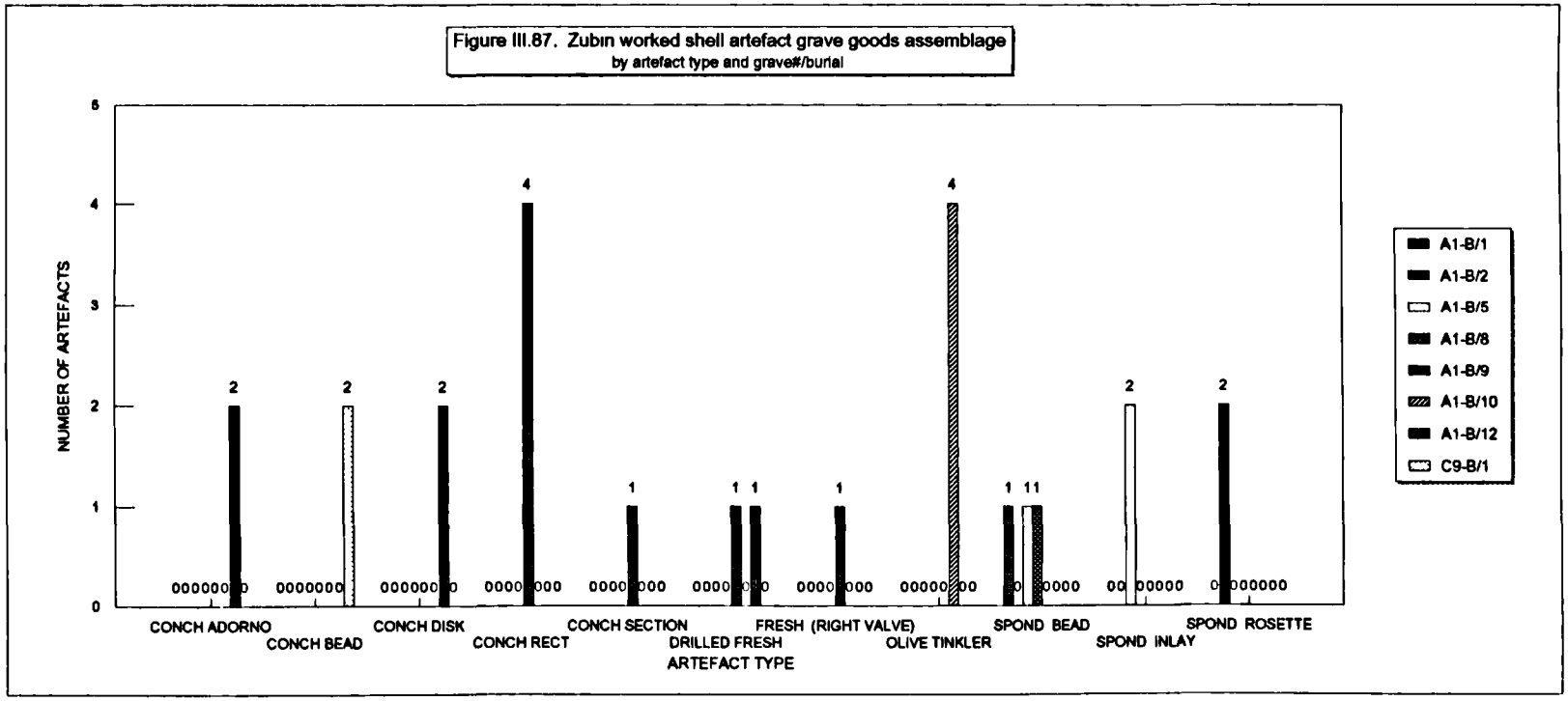


Figure III 86. Zubin worked shell artefact assemblage by artefact type and context type

Table III.34. Zubin worked shell artefact grave goods assemblage by artefact type and grave#/burial.

	A1-B/1	A1-B/2	A1-B/5	A1-B/8	A1-B/9	A1-B/10	A1-B/12	C9-B/1	TOTAL	PERCENTAGE
CONCH ADORNO	0	0	0	0	0	0	2	0	2	8 00
CONCH BEAD	0	0	0	0	0	0	0	2	2	8.00
CONCH DISK	0	0	0	0	0	0	2	0	2	8.00
CONCH RECT.	0	0	0	0	4	0	0	0	4	16.00
CONCH SECTION	0	0	0	0	1	0	0	0	1	4.00
DRILLED FRESH	0	0	0	0	1	0	1	0	2	8 00
FRESH (RIGHT VALVE)	0	0	0	0	1	0	0	0	1	4.00
OLIVE TINKLER	0	0	0	0	0	4	0	0	4	16.00
SPOND BEAD	1	0	1	1	0	0	0	0	3	12.00
SPOND INLAY	0	0	2	0	0	0	0	0	2	8.00
SPOND ROSETTE	0	2	0	0	0	0	0	0	2	8.00
TOTAL	1	2	3	1	7	4	5	2	25	
PERCENTAGE	4 00	8 00	12 00	4 00	28.00	16 00	20.00	8 00		100%

NOTE RECT = RECTANGULATE FRESH = FRESHWATER CLAM SPOND = SPONDYLUS



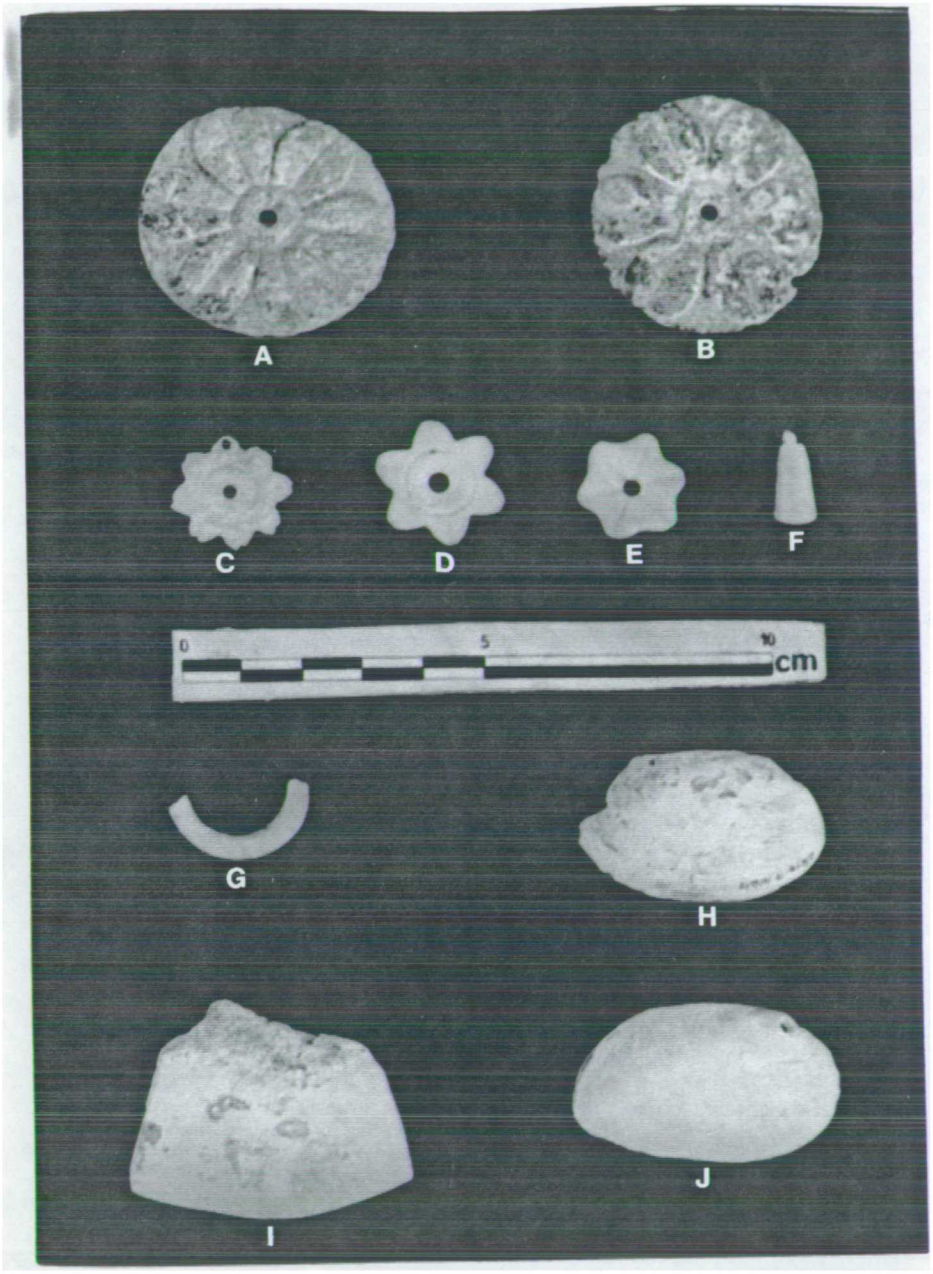


Figure III 88 Worked shell artefacts from Zubin (a) spondylus rosette (A1-SF 13), (b) spondylus rosette (A1-SF 14), (c) conch adorno (A1-SF 39), (d) conch adorno (A1-SF 232), (e) conch adorno (A1-SF 231), (f) conch pendant (A4-SF 43), (g) carved freshwater clam (A4-SF 1), (h) freshwater clam/right valve (A1-SF 50), (i) worked conch (A1-SF 45), (j) freshwater clam/drilled (A1-SF 228)

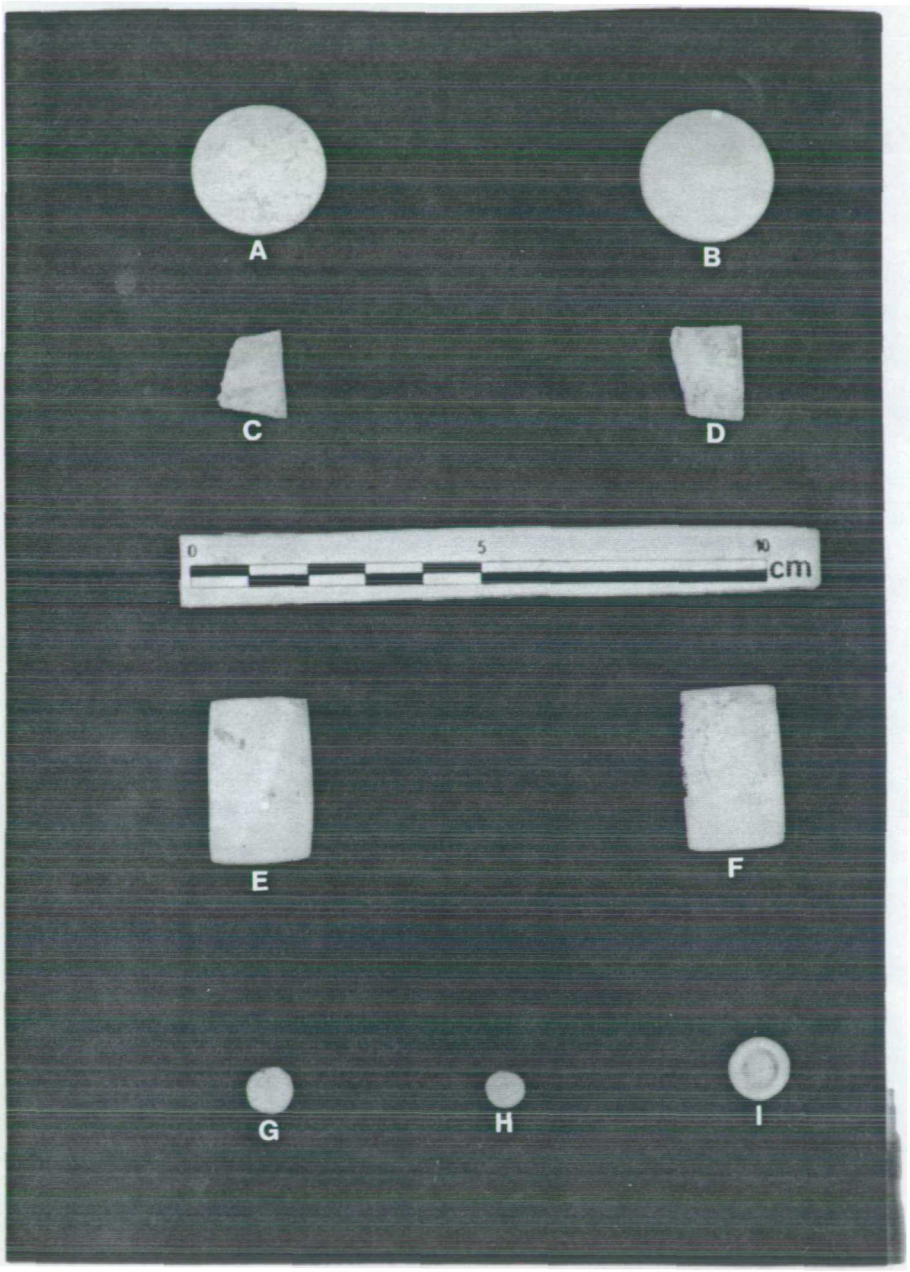


Figure III 89 Worked shell artefacts from Zubin (a) conch disk (A1-SF/229), (b) conch disk (A1-SF 230), (c) conch rectangulate (A1-SF 46), (d) conch rectangulate (A1-SF 47), (e) conch rectangulate (A1-SF 48), (f) conch rectangulate (A1-SF 49), (g) spondylus inlay (A1-SF 53), (h) spondylus inlay (A1-SF 54), (i) conch shell adorno (A4-SF 13)

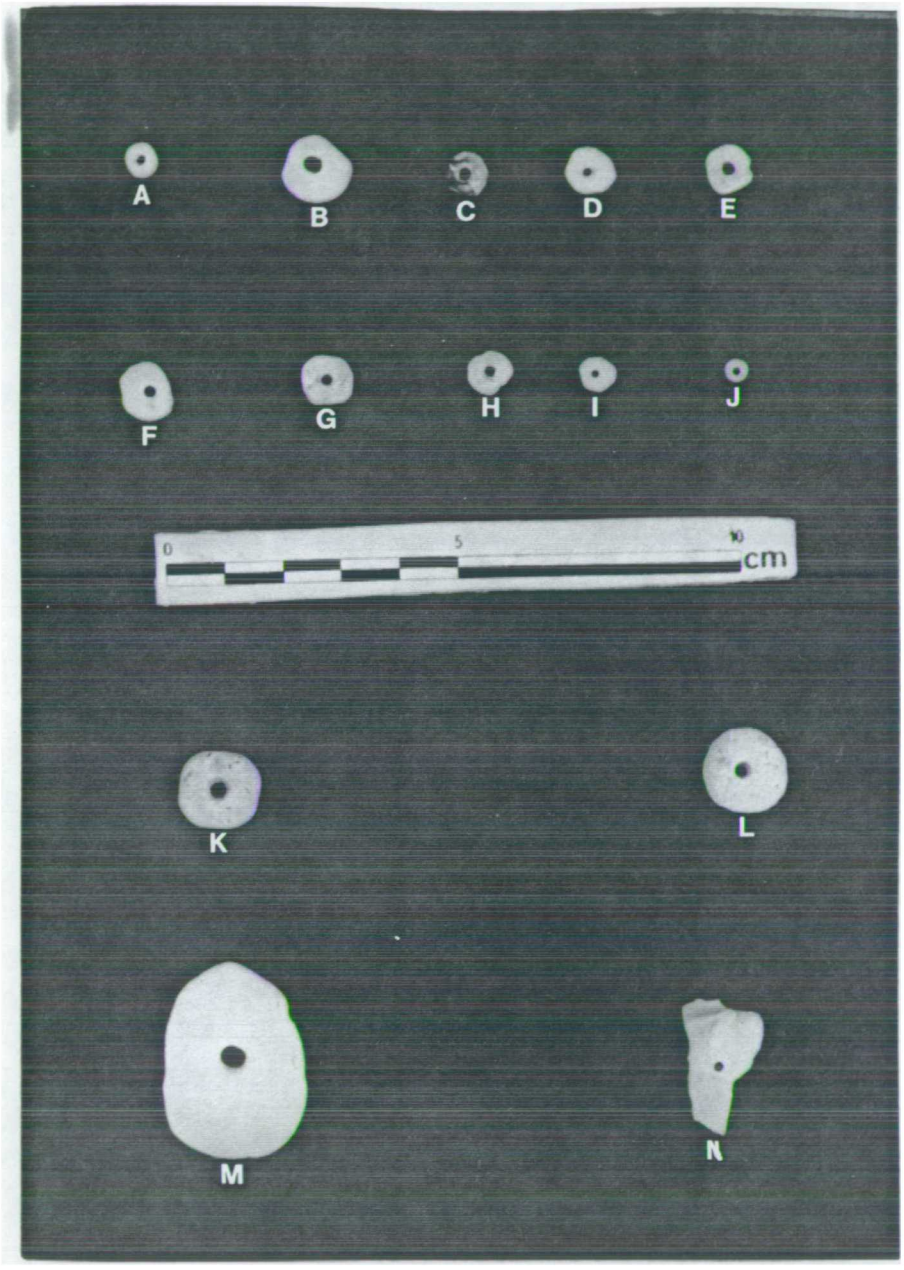


Figure III 90 Shell beads from Zubin (a) spondylus bead (A1-SF 52), (b) shell bead (A4-SF 49) (c) conch bead (C9-SF 15), (d) conch bead (C9-SF 16), (e) conch bead (C9-SF 17), (f) conch bead (C9-SF 18), (g) conch bead (C9-SF 19), (h) conch bead C9-SF 20); (i) conch bead (C9-SF 62), (j) conch bead (C9-SF 63), (k) spondylus bead (A1-SF 8), (l) spondylus bead (A1-SF 55), (m) shell bead (A4-SF 44) (n) conch shell bead (C9-SF 7)

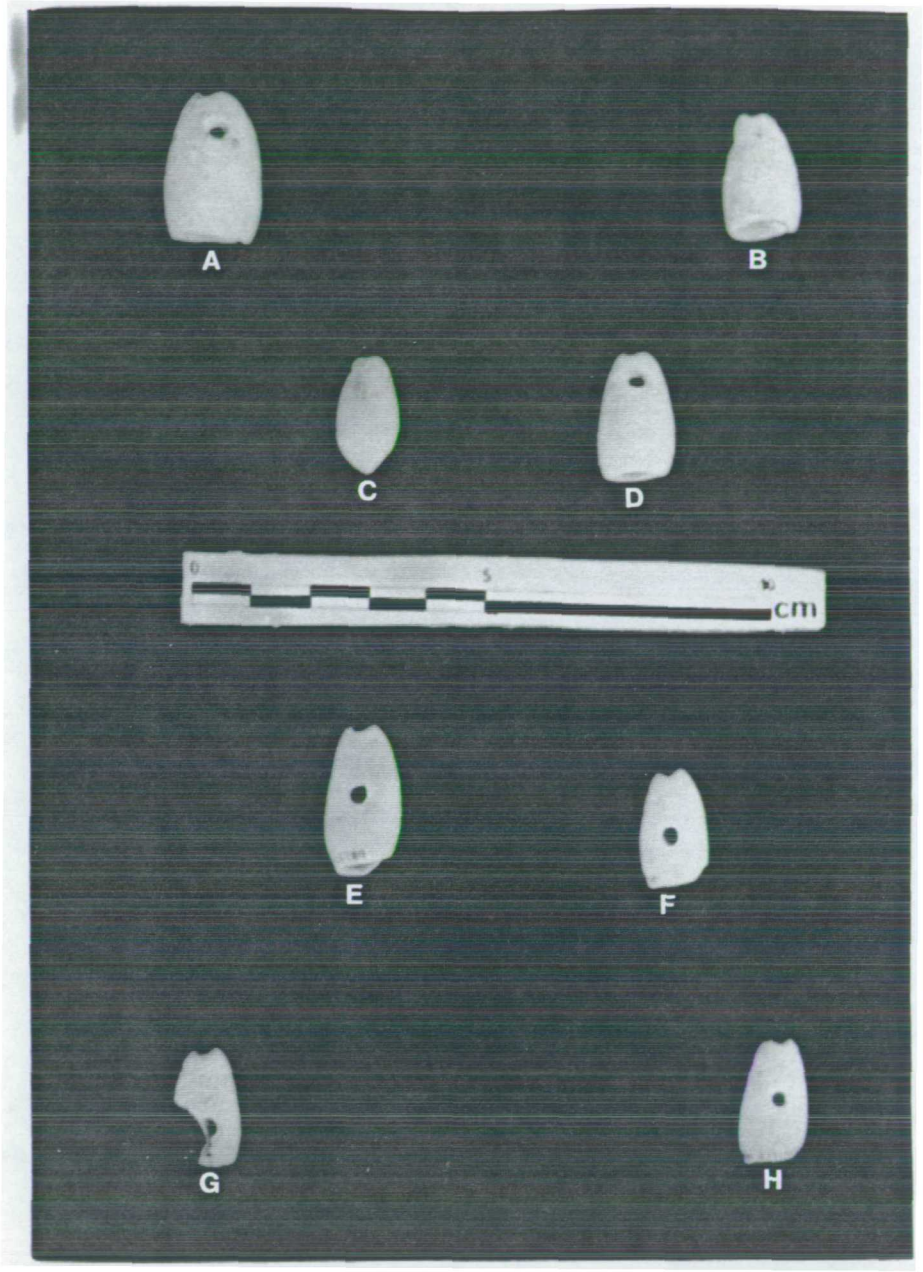


Figure III 91 Olive shell tinklers from Zubin (a) A1-SF 40, (b) A1-SF 41, (c) A1-SF 42, (d) A1-SF 43, (e) A4-SF 39, (f) A4-SF/40, (g) E12-SF 1, (h) E12-SF 2

Table III.35. Zubin lithic assemblage by phase and raw material.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	XNIPEK	EARLY MAXIK	LATE MAXIK	MAXIK	MIXED	UNKNOWN	TOTAL	PERCENTAGE
ANDESITE	0	0	0	0	0	2	1	0	0	0	3	0.52
BASALT	0	0	0	0	0	2	1	0	0	0	3	0.52
CHERT	5	7	8	2	0	35	70	7	3	6	143	24 96
GABBRO	0	0	0	0	0	1	0	0	0	0	1	0.17
GRANITE	0	0	1	0	1	17	36	0	0	8	63	10.99
GREENSTONE	6	1	0	12	0	0	1	0	0	0	20	3 49
JADE	5	0	1	4	1	166	0	0	0	0	177	30 89
LIMESTONE	0	0	3	0	0	5	7	0	0	1	16	2 79
OBSIDIAN	6	8	1	2	13	44	49	0	2	1	126	21.99
QUARTZITE	1	2	0	1	0	2	3	0	0	0	9	1.57
QUARTZ MASSIVE	0	0	1	0	0	0	1	1	0	0	3	0.52
SERPENTINE	0	0	0	0	0	1	0	0	0	0	1	0 17
SLATE	0	0	1	0	0	3	0	1	2	0	7	1.22
SYENITE	0	0	1	0	0	0	0	0	0	0	1	0.17
TOTAL	23	18	17	21	15	278	169	9	7	16	573	
PERCENTAGE	4 01	3.14	2 97	3.66	2.62	48.52	29.49	1.57	1 22	2.79		100%

Figure III.92. Zubin lithic assemblage by raw material type

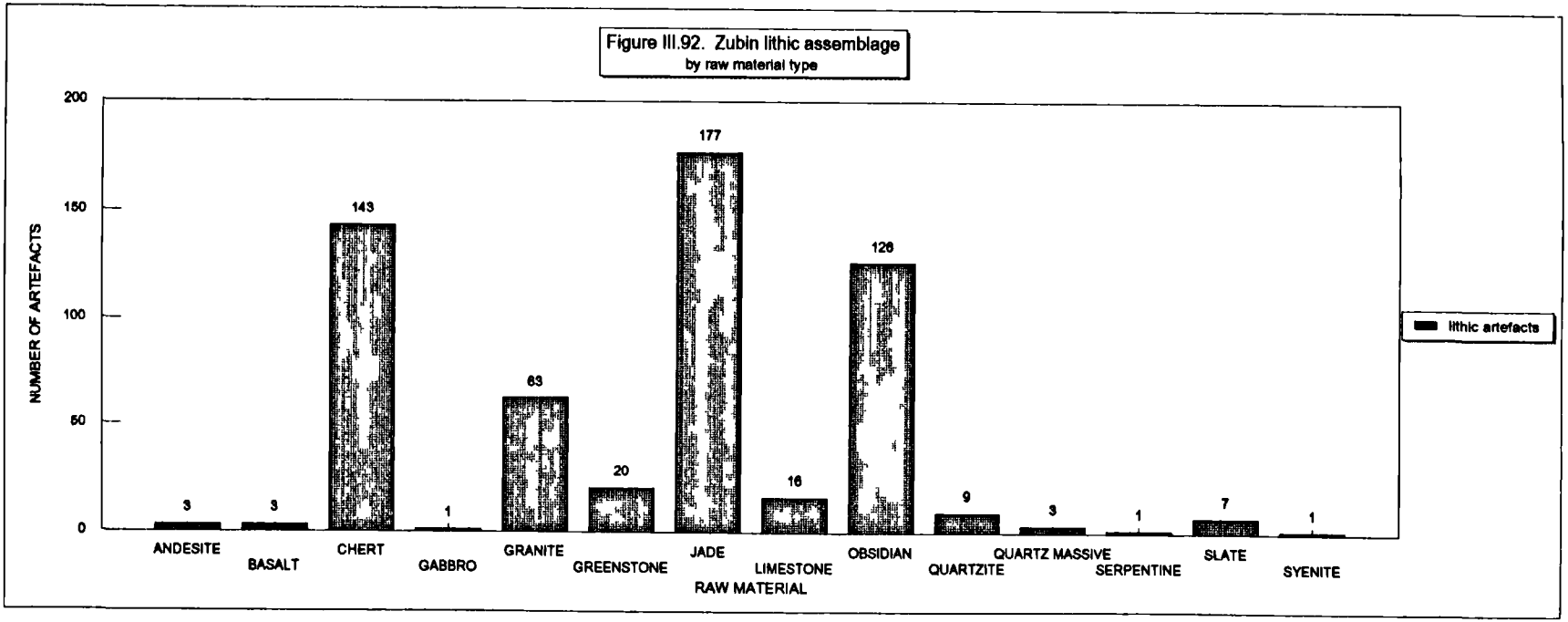


Figure III 93. Zubin lithic assemblage by phase

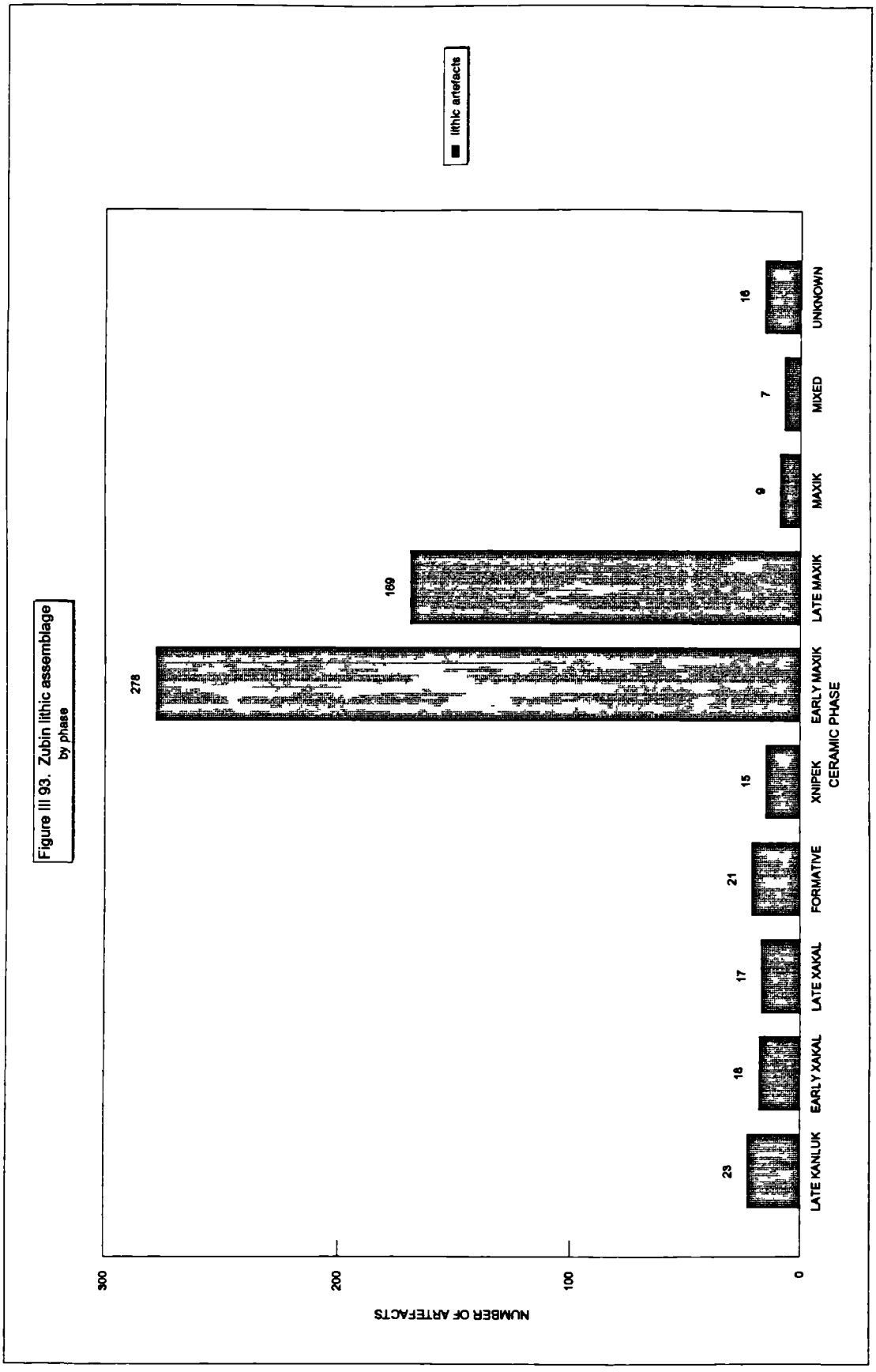


Table III.36. Zubin lithic assemblage by raw material and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	D11	E12	F14	OP.100	OP.101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
ANDESITE	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0 52
BASALT	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0 52
CHERT	17	4	45	11	13	7	5	1	11	15	0	1	2	11	143	24.96
GABBRO	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.17
GRANITE	6	1	21	4	15	0	1	0	8	3	1	0	0	3	63	10.99
GREENSTONE	0	0	0	0	0	19	0	0	0	1	0	0	0	0	20	3 49
JADE	167	0	1	0	0	9	0	0	0	0	0	0	0	0	177	30 89
LIMESTONE	6	0	4	0	0	0	0	0	3	1	0	1	0	1	16	2.79
OBSIDIAN	27	1	51	6	23	4	2	0	3	2	1	1	3	1	125	21 82
QUARTZ MASSIVE	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0.70
QUARTZITE	3	0	2	1	1	2	0	0	0	0	0	0	0	0	9	1 57
SERPENTINE	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0 17
SLATE	0	1	2	0	1	2	0	0	1	0	0	0	0	0	7	1.22
SYENITE	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0 17
TOTAL	230	7	132	22	54	44	8	1	27	22	2	3	5	16	573	
PERCENTAGE	40.14	1.22	23 04	3.84	9.42	7.68	1 40	0 17	4.71	3.84	0.35	0.52	0.87	2 79		100%

Figure III.94. Zubin lithic assemblage by Structure/Operation

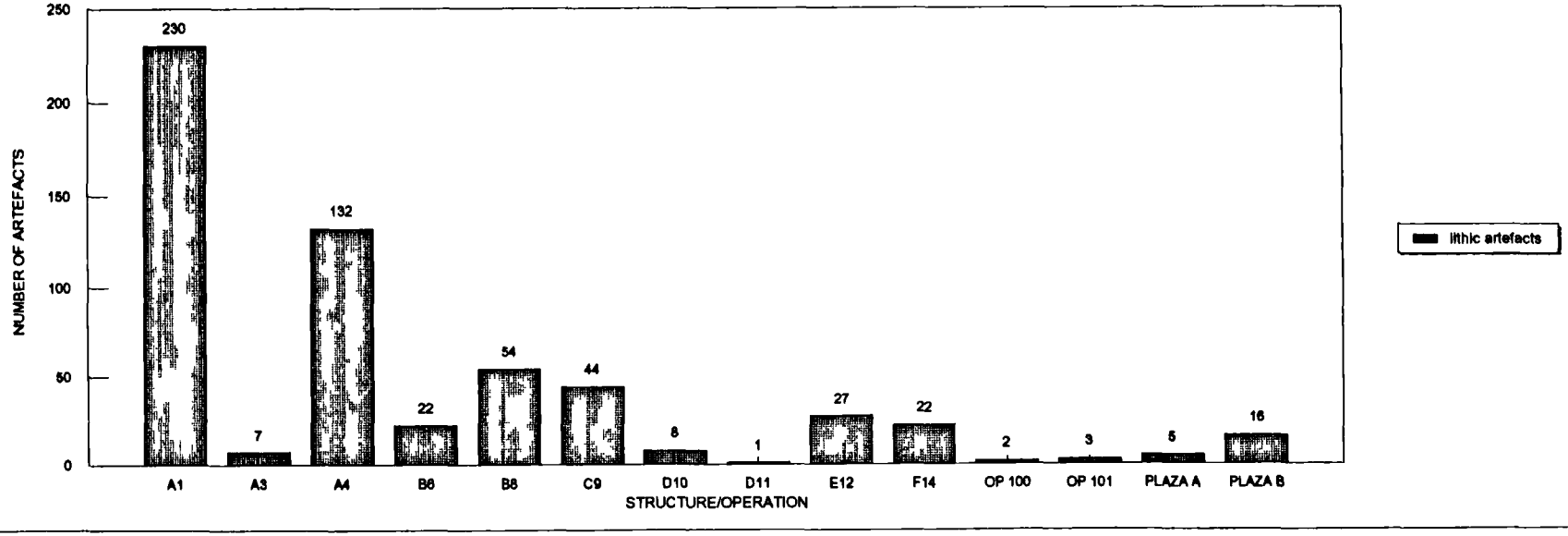


Table III.37. Zubin lithic assemblage by raw material and context type.

	ANDESITE	BASALT	CHERT	GABBRO	GRANITE	GREENSTONE	JADE	LIMESTONE	OBSIDIAN	QUARTZ MASSIVE	QUARTZITE	SERPENTINE	SLATE	SYENITE	TOTAL	PERCENTAGE
BK DRT	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0 17
CACHE	0	0	3	0	0	0	0	0	4	0	0	0	0	0	7	1 22
COLLUV	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0 17
COL /SPALL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0 17
FALL	0	0	16	0	16	0	0	1	19	0	2	0	0	0	54	9 42
FILL	2	2	73	1	19	6	4	8	48	2	4	1	4	1	175	30 54
FLOOR	0	0	2	0	3	0	0	1	4	0	0	0	0	0	10	1 75
GRAVE	0	0	1	0	0	2	168	1	14	0	1	0	0	0	187	32 64
HU-FA-FI	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0 52
HUM-FALL	0	0	2	0	0	0	0	0	12	0	0	0	2	0	16	2 79
HUMUS	1	1	31	0	17	0	0	3	11	1	1	0	0	0	66	11 52
LOOT-BACK	0	0	2	0	0	12	4	0	2	0	1	0	0	0	21	3 66
MIDDEN	0	0	0	0	0	0	1	0	4	0	0	0	0	0	5	0 87
MIXED	0	0	6	0	0	0	0	0	0	1	0	0	1	0	8	1 40
PALEOSOL	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0 17
SURFACE	0	0	5	0	8	0	0	2	2	0	0	0	0	0	17	2 97
TOTAL	3	3	143	1	63	20	177	16	125	4	9	1	7	1	573	
PERCENTAGE	0 52	0 52	24 96	0.17	10.99	3.49	30.89	2.79	21.82	0.70	1.57	0 17	1 22	0 17		100%

NOTE BK DRT = BACKDIRT COLLUV = COLLUVIUM COL /SPALL = COLLUVIUM/SPALL, HU-FA-FI = HUMUS/FALL/FILL HUM-FALL = HUMUS/FALL LOOT-BACK = LOOTER S BACKDIRT

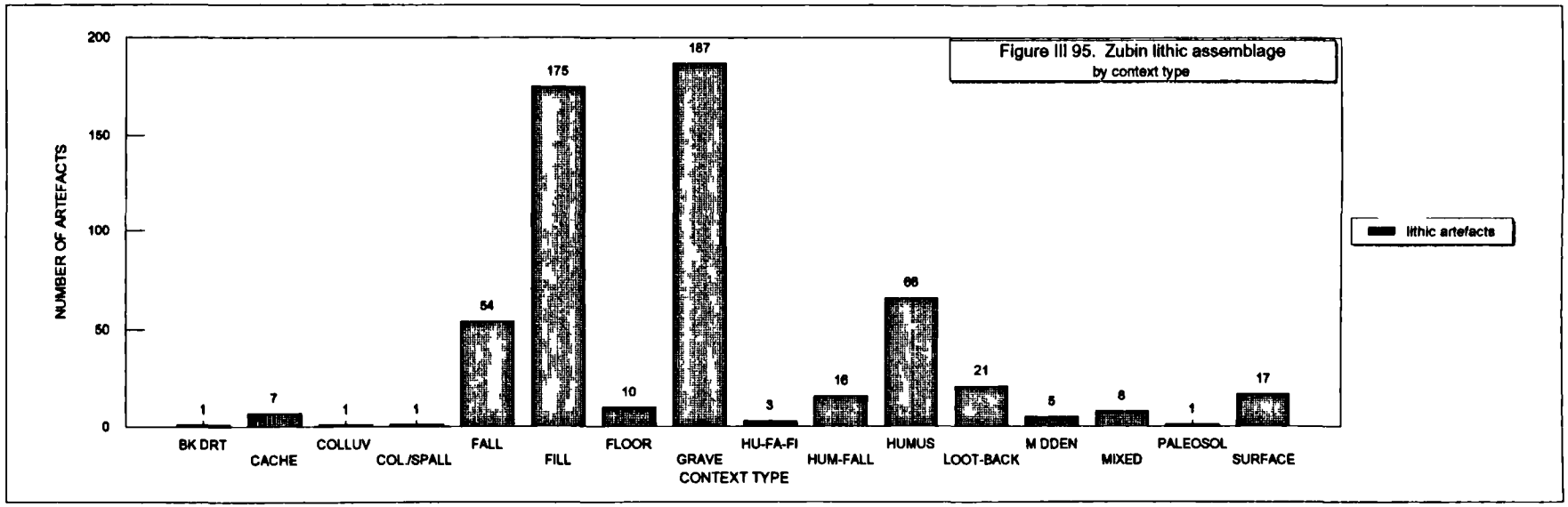
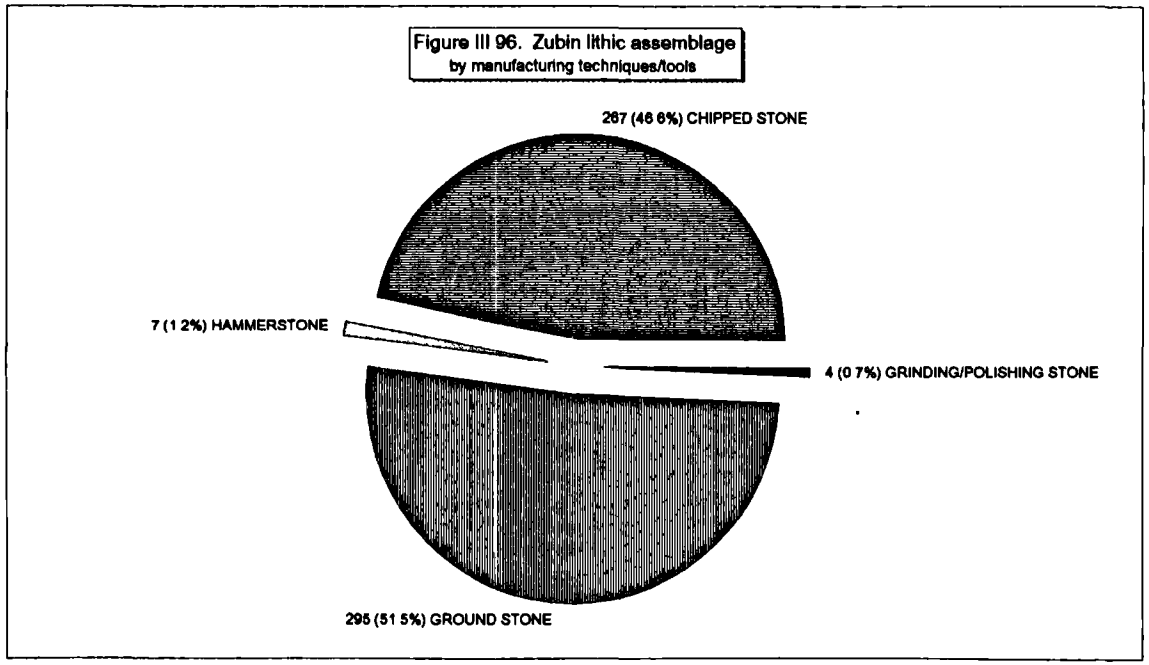


Table III.38. Zubin lithic assemblage by raw material and manufacturing techniques/tools.

	CHIPPED STONE	HAMMERSTONE	GROUND STONE	GRINDING/POLISHING STONE	TOTAL	PERCENTAGE
ANDESITE	0	0	3	0	0	0 52
BASALT	1	0	2	0	1	0 52
CHERT	140	2	0	1	142	24 96
GABBRO	0	0	1	0	0	0.17
GRANITE	0	0	62	1	0	10 99
GREENSTONE	0	0	20	0	0	3.49
JADE	0	0	177	0	0	30 89
LIMESTONE	0	0	16	0	0	2.79
OBSIDIAN	125	0	0	0	125	21 82
QUARTZ MASSIVE	0	0	4	0	0	0.70
QUARTZITE	1	5	2	1	6	1.57
SERPENTINE	0	0	0	1	0	0 17
SLATE	0	0	7	0	0	1 22
SYENITE	0	0	1	0	0	0 17
TOTAL	267	7	295	4	274	
PERCENTAGE	46 60	1.22	51.48	0.70		100%



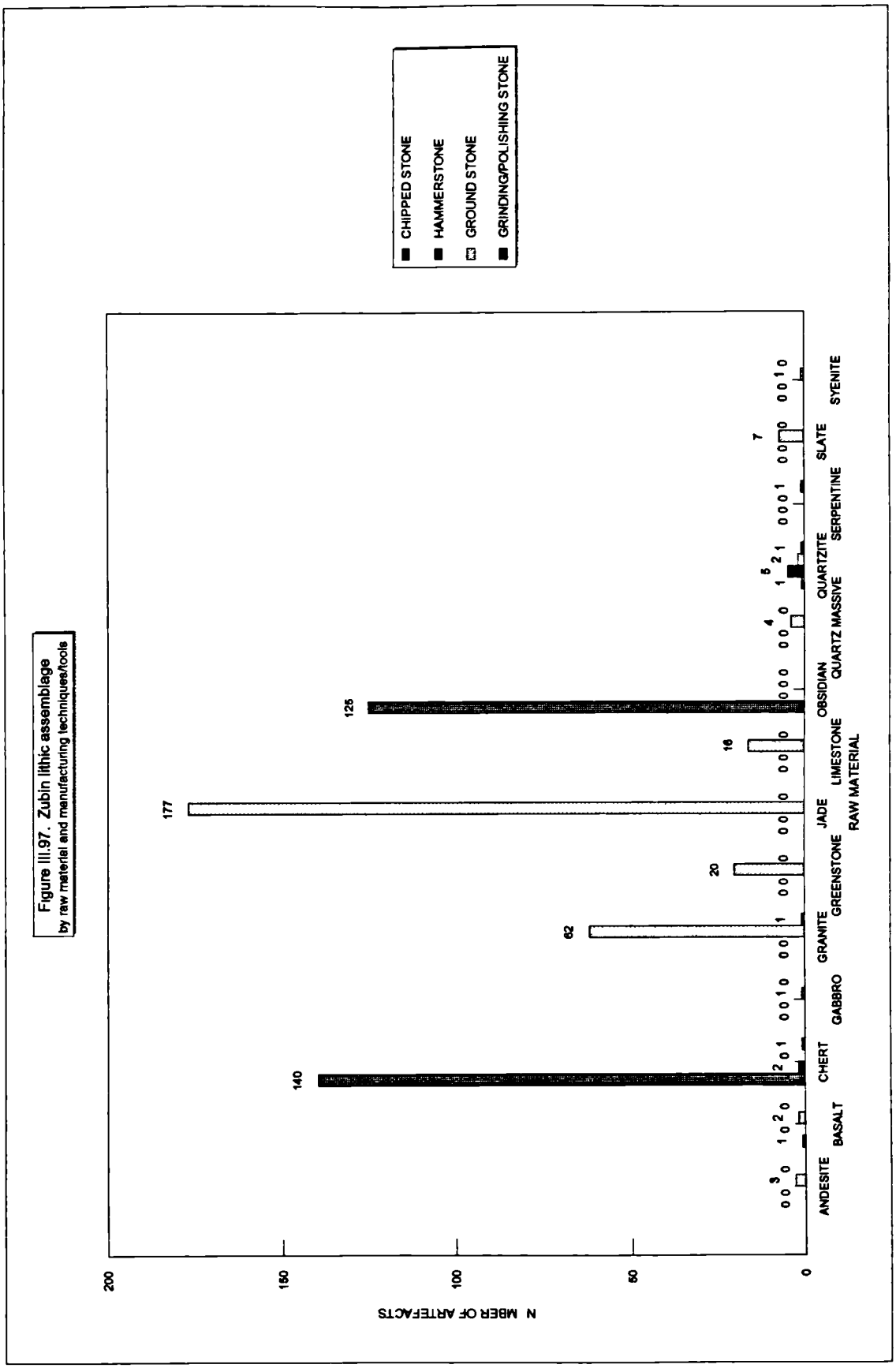


Figure III.97. Zubin lithic assemblage
by raw material and manufacturing techniques/tools
CHIPPED STONE
HAMMERSTONE
GROUND STONE
GRINDING/POLISHING STONE
NUMBER OF ARTEFACTS
0
50
100
150
200
ANDESITE
BASALT
CHERT
GABBRO
GRANITE
GREENSTONE
JADE
LIMESTONE
OBSIDIAN
QUARTZ MASSIVE
QUARTZITE
SERPENTINE
SLATE
SYENITE
RAW MATERIAL
3
0
0
2
0
1
0
140
2
0
1
0
0
1
0
62
1
0
0
20
0
0
0
177
0
0
0
16
0
0
0
125
0
0
0
4
0
0
0
5
1
2
1
0
0
0
1
7
0
0
1
0

Table III.39. Zubin lithic assemblage by phase and manufacturing techniques/tools.

	CHIPPED STONE	HAMMERSTONE	GROUND STONE	GRINDING/POLISHING STONE	TOTAL	PERCENTAGE
LATE KANLUK	11	1	11	0	23	4.01
EARLY XAKAL	15	1	1	1	18	3 14
LATE XAKAL	9	0	7	1	17	2 97
FORMATIVE	4	0	17	0	21	3 66
XNIPEK	13	0	2	0	15	2.62
EARLY MAXIK	78	1	198	1	278	48 52
LATE MAXIK	119	4	46	0	169	29.49
MAXIK	6	0	2	1	9	1 57
MIXED	5	0	2	0	7	1.22
UNKNOWN	7	0	9	0	16	2.79
TOTAL	267	7	295	4	573	
PERCENTAGE	46 60	1.22	51.48	0.70		100%

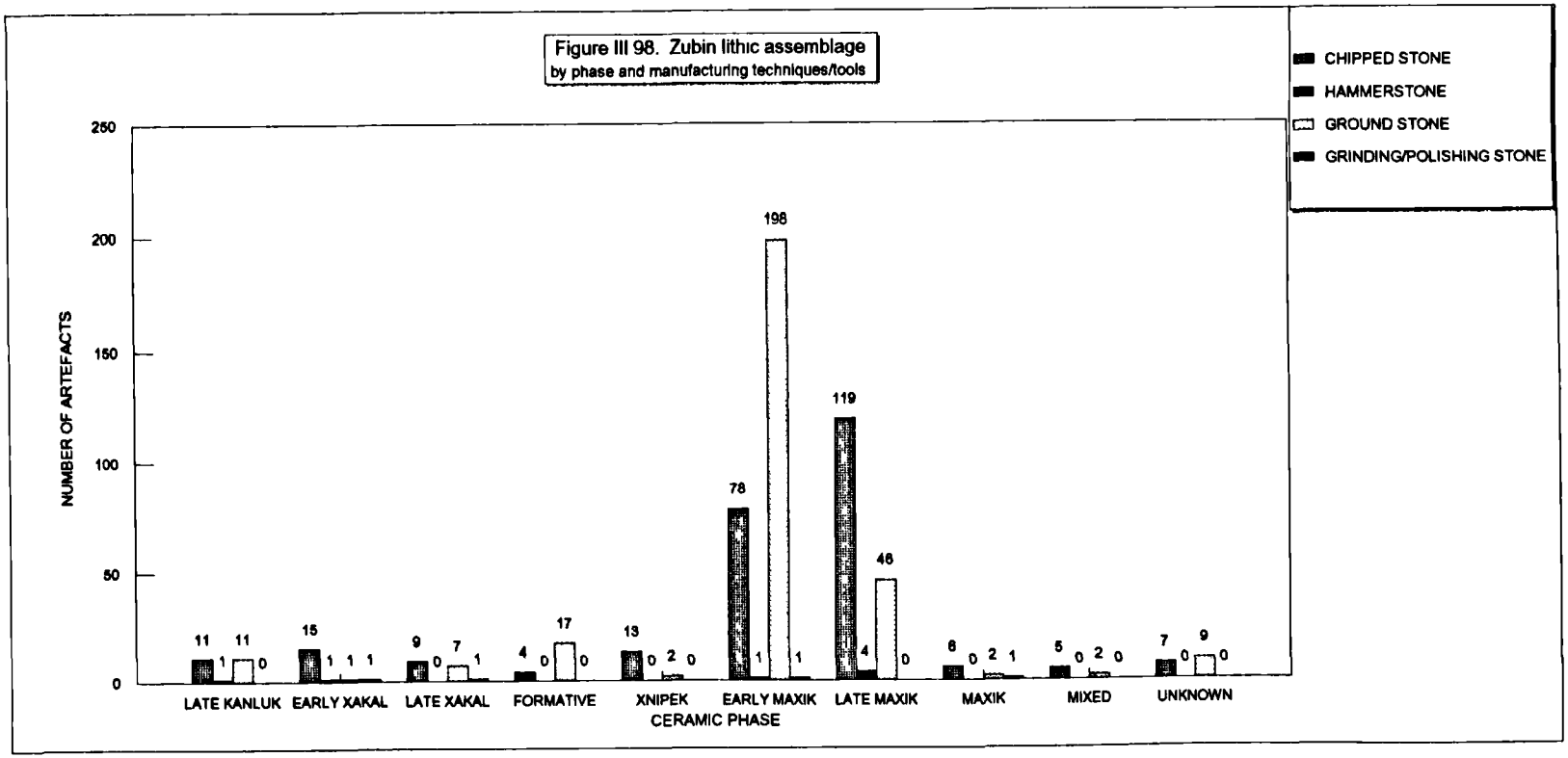


Table III.40. Zubin lithic assemblage by manufacturing techniques/tools and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	D11	E12	F14	OP.100	OP.101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
CHIPPED STONE	44	5	96	17	36	11	7	1	14	17	1	2	5	11	267	46 60
GRINDING/POLISHING STONE	0	0	3	0	0	1	0	0	0	0	0	0	0	0	4	0.70
GROUND STONE	183	2	32	4	17	32	1	0	13	5	1	1	0	4	295	51 48
HAMMERSTONE	3	0	1	1	1	0	0	0	0	0	0	0	0	1	7	1.22
TOTAL	230	7	132	22	54	44	8	1	27	22	2	3	5	16	573	
PERCENTAGE	40 14	1.22	23.04	3 84	9.42	7.68	1.40	0.17	4.71	3 84	0.35	0.52	0.87	2 79		100%

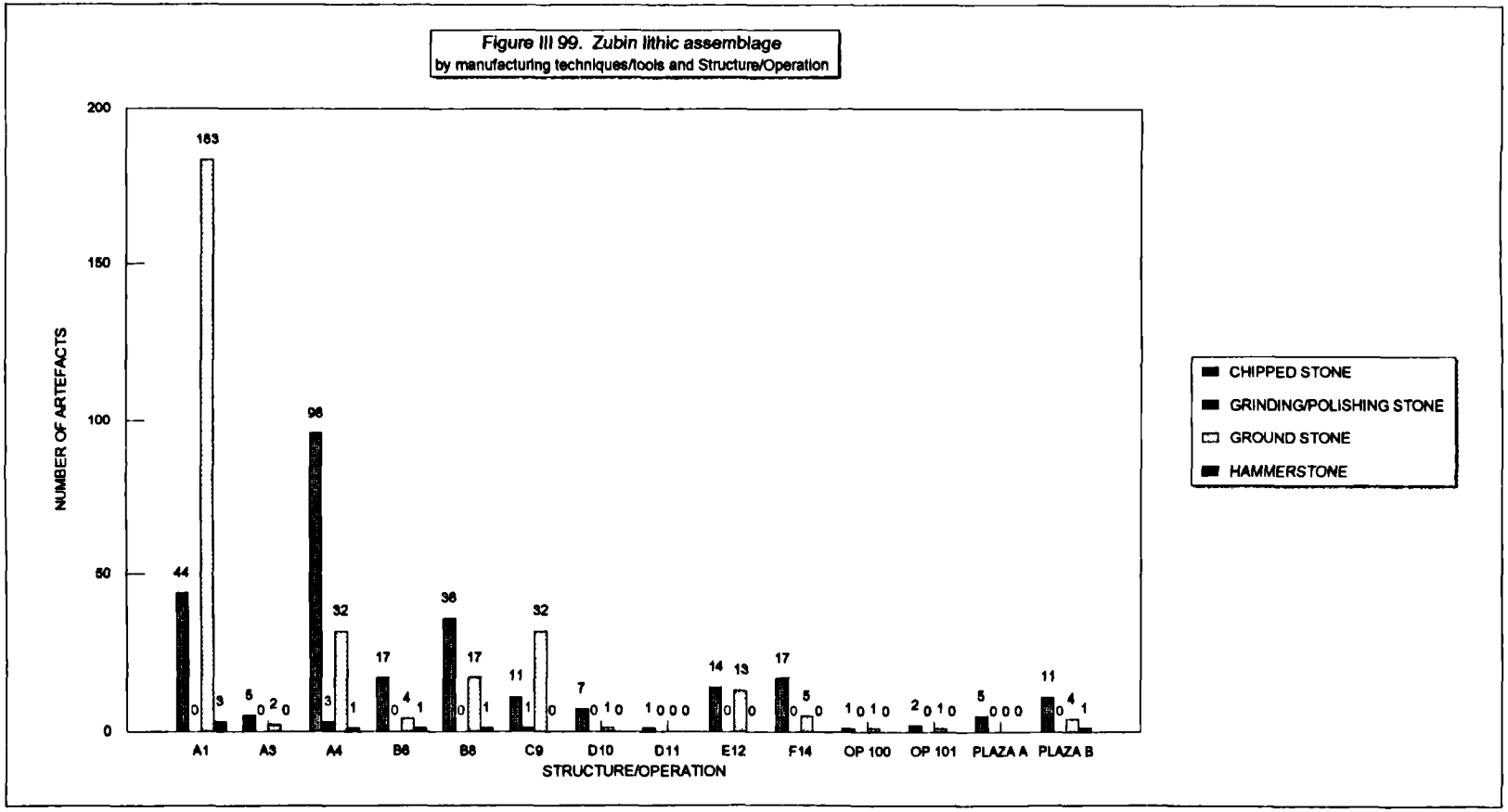


Table III.41. Zubin lithic assemblage by manufacturing techniques/tools and context type.

	CHIPPED STONE	GRINDING/POLISHING STONE	GROUND STONE	HAMMERSTONE	TOTAL	PERCENTAGE
BK DRT	1	0	0	0	1	0.17
CACHE	7	0	0	0	7	1.22
COLLUV.	1	0	0	0	1	0 17
COL./SPALL.	1	0	0	0	1	0.17
FALL	35	0	17	2	54	9 42
FILL	119	3	49	4	175	30 54
FLOOR	6	0	4	0	10	1 75
GRAVE	16	0	171	0	187	32 64
HU FA FI	3	0	0	0	3	0.52
HUM FALL	14	0	2	0	16	2 79
HUMUS	43	0	22	1	66	11.52
LOOT BACK	4	0	17	0	21	3.66
MIDDEN	4	0	1	0	5	0.87
MIXED	5	1	2	0	8	1.40
PALEOSOL	1	0	0	0	1	0.17
SURFACE	7	0	10	0	17	2 97
TOTAL	267	4	295	7	573	
PERCENTAGE	46.60	0.70	51.48	1.22		100

NOTE BK DRT = BACKDIRT COLLUV = COLLUVIUM, COL /SPALL = COLLUVIUM/SPALL, HU-FA-FI = HUMUS/FALL/FILL, HUM-FALL = HUMUS/FALL, LOOT BACK = LOOTER'S BACKDIRT

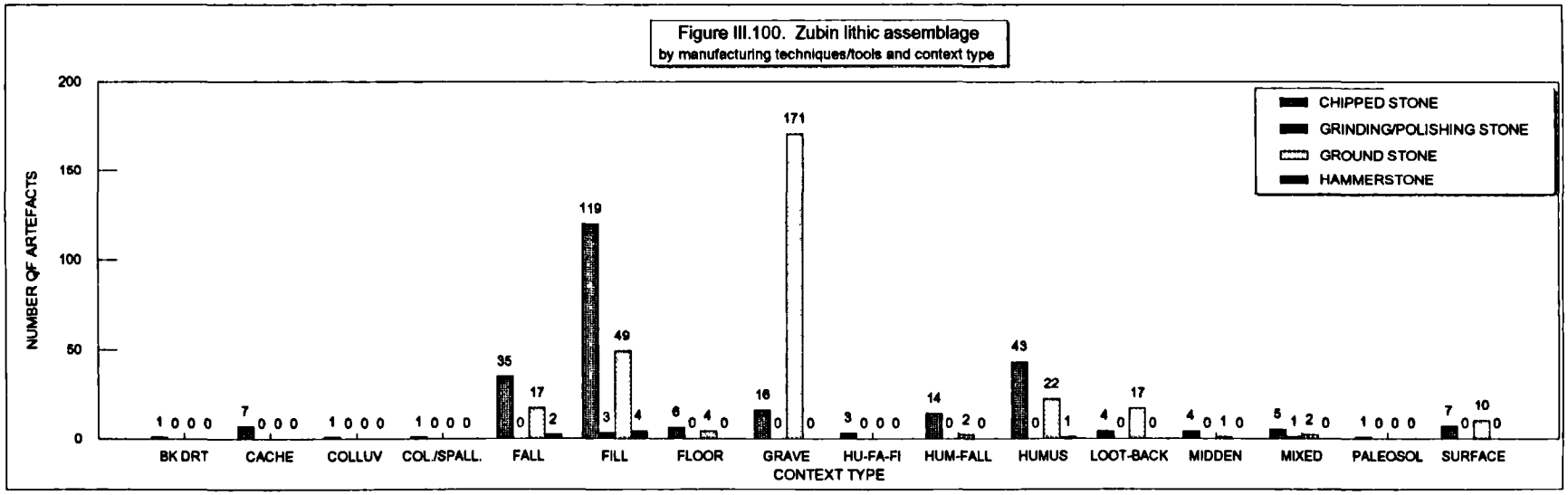
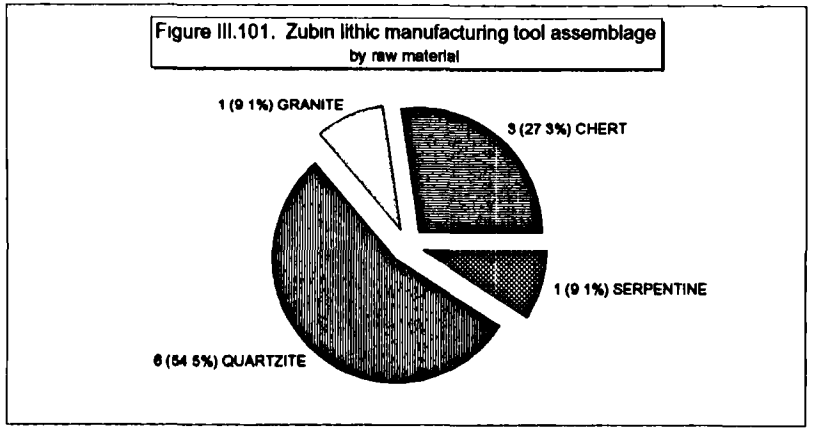
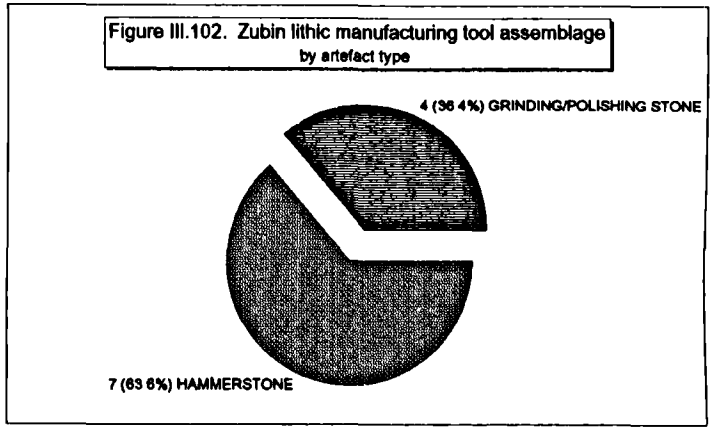


Table III.42*. Zubin lithic manufacturing tool assemblage by raw material and artefact type.

	CHERT	GRANITE	QUARTZITE	SERPENTINE	TOTAL	PERCENTAGE
GRINDING/POLISHING STONE	1	1	1	1	4	36 36
HAMMERSTONE	2	0	5	0	7	63.64
TOTAL	3	1	6	1	11	
PERCENTAGE	27.27	9 09	54.55	9 09		100%





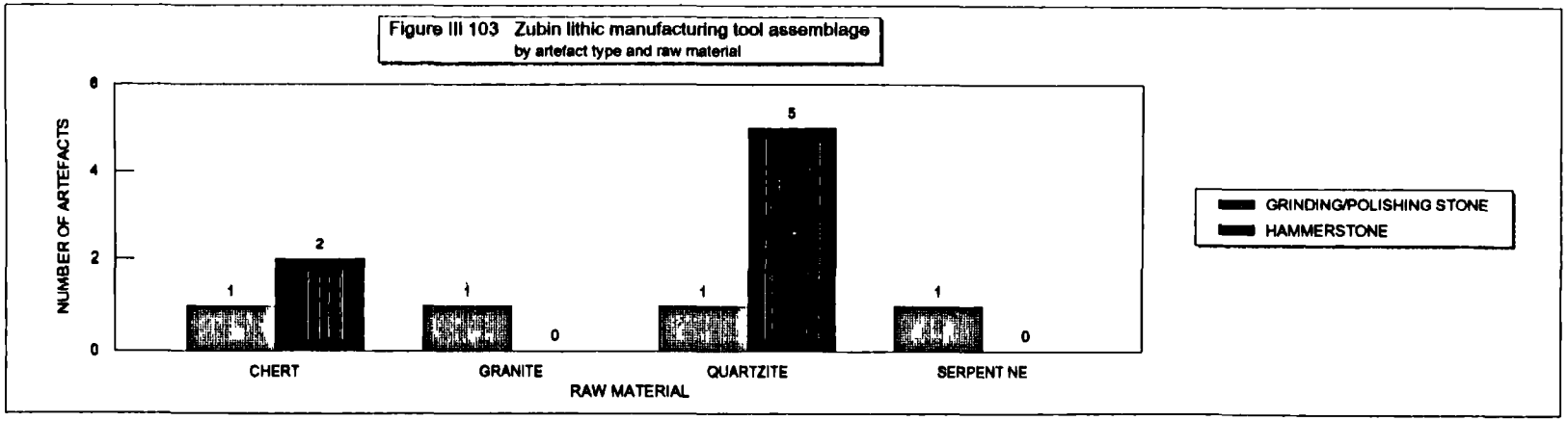
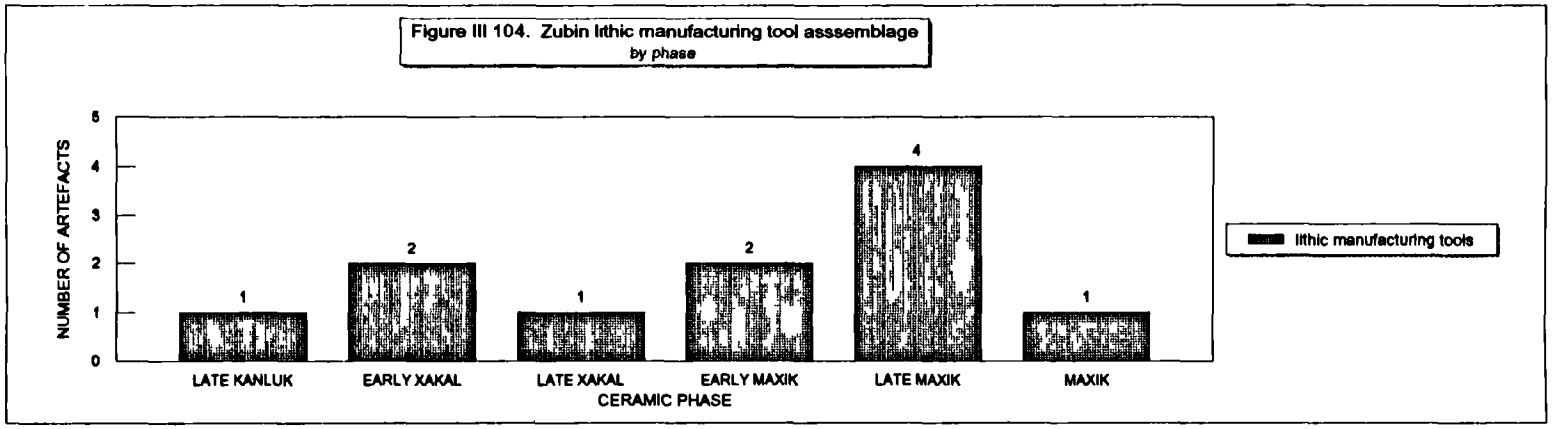


Table III.43. Zubin lithic manufacturing tool assemblage by phase and artefact type.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	EARLY MAXIK	LATE MAXIK	MAXIK	TOTAL	PERCENTAGE
GRINDING/POLISHING STONE	0	1	1	1	0	1	4	36 36
HAMMERSTONE	1	1	0	1	4	0	7	63 64
TOTAL	1	2	1	2	4	1	11	
PERCENTAGE	9 09	18 18	9 09	18 18	36 36	9.09		100%



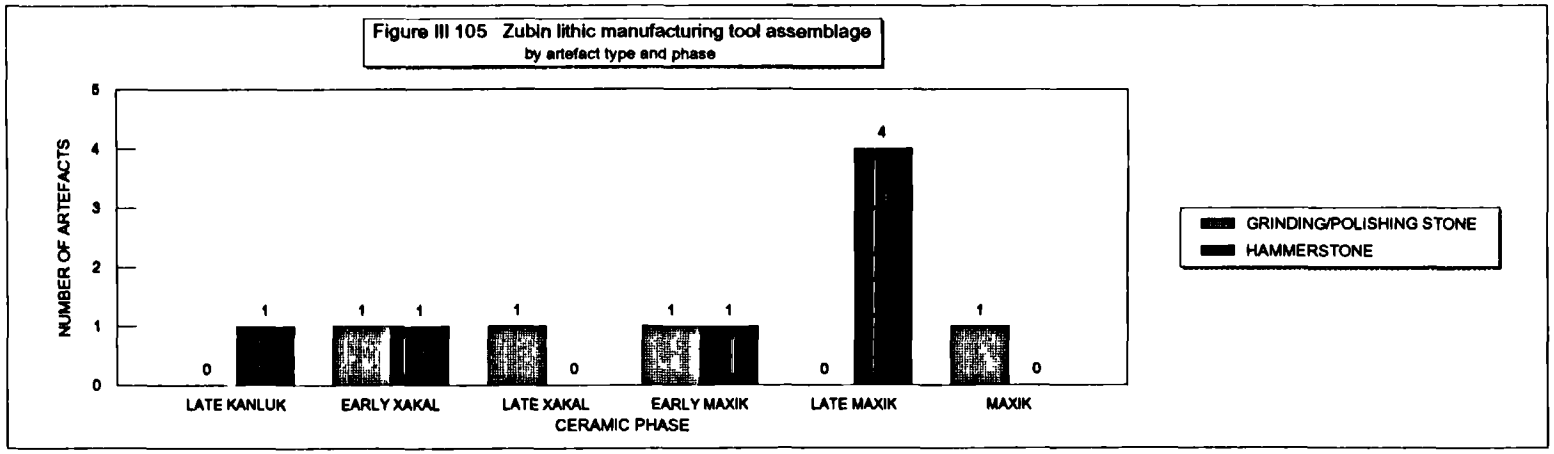
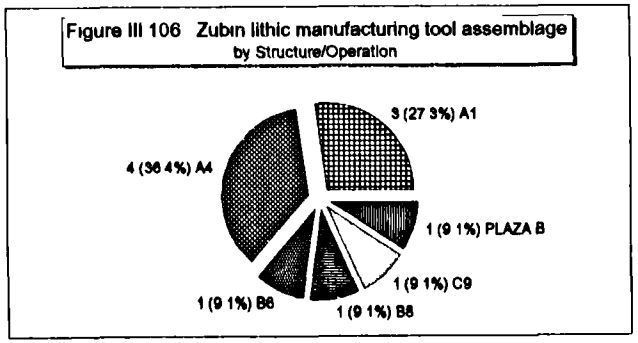


Table III.44. Zubin lithic manufacturing tool assemblage by artefact type and Structure/Operation.

	A1	A4	B6	B8	C9	PLAZA B	TOTAL	PERCENTAGE
GRINDING/POLISHING STONE	0	3	0	0	1	0	4	36 36
HAMMERSTONE	3	1	1	1	0	1	7	63.64
TOOLS	3	4	1	1	1	1	11	
PERCENTAGE	27.27	36.36	9.09	9.09	9.09	9.09		100%



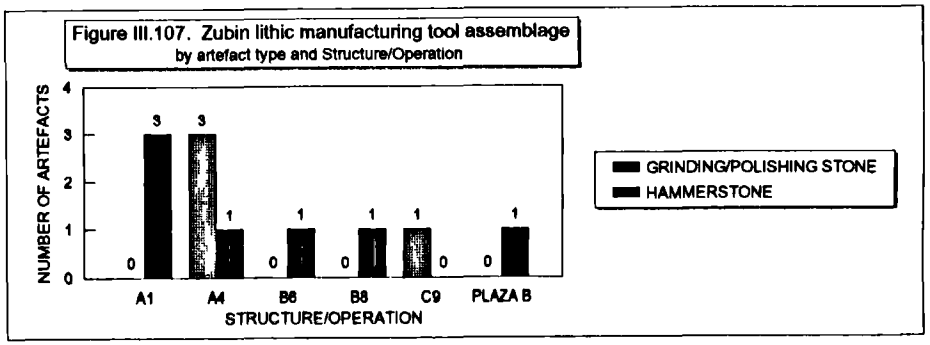
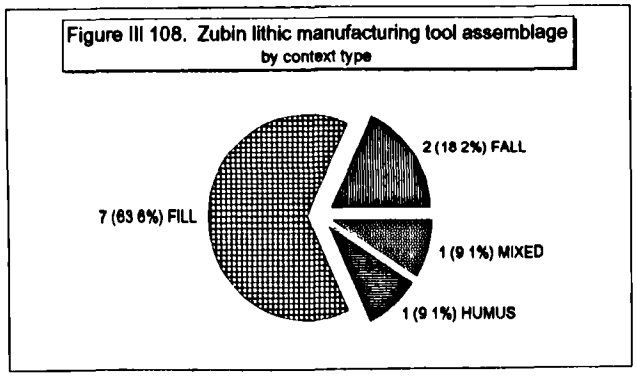
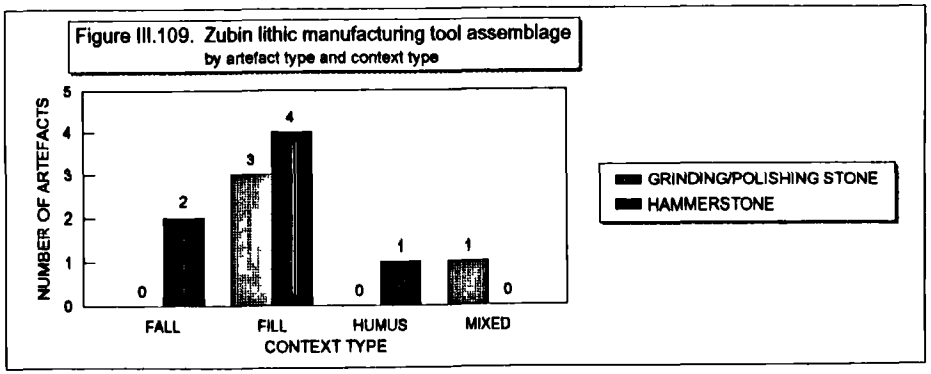


Table III.45. Zubin lithic manufacturing tool assemblage by artefact type and context type.

	FALL	FILL	HUMUS	MIXED	TOTAL	PERCENTAGE
GRINDING/POLISHING STONE	0	3	0	1	4	36.36
HAMMERSTONE	2	4	1	0	7	63.64
TOTAL	2	7	1	1	11	
PERCENTAGE	18.18	63.64	9.09	9 09		100%





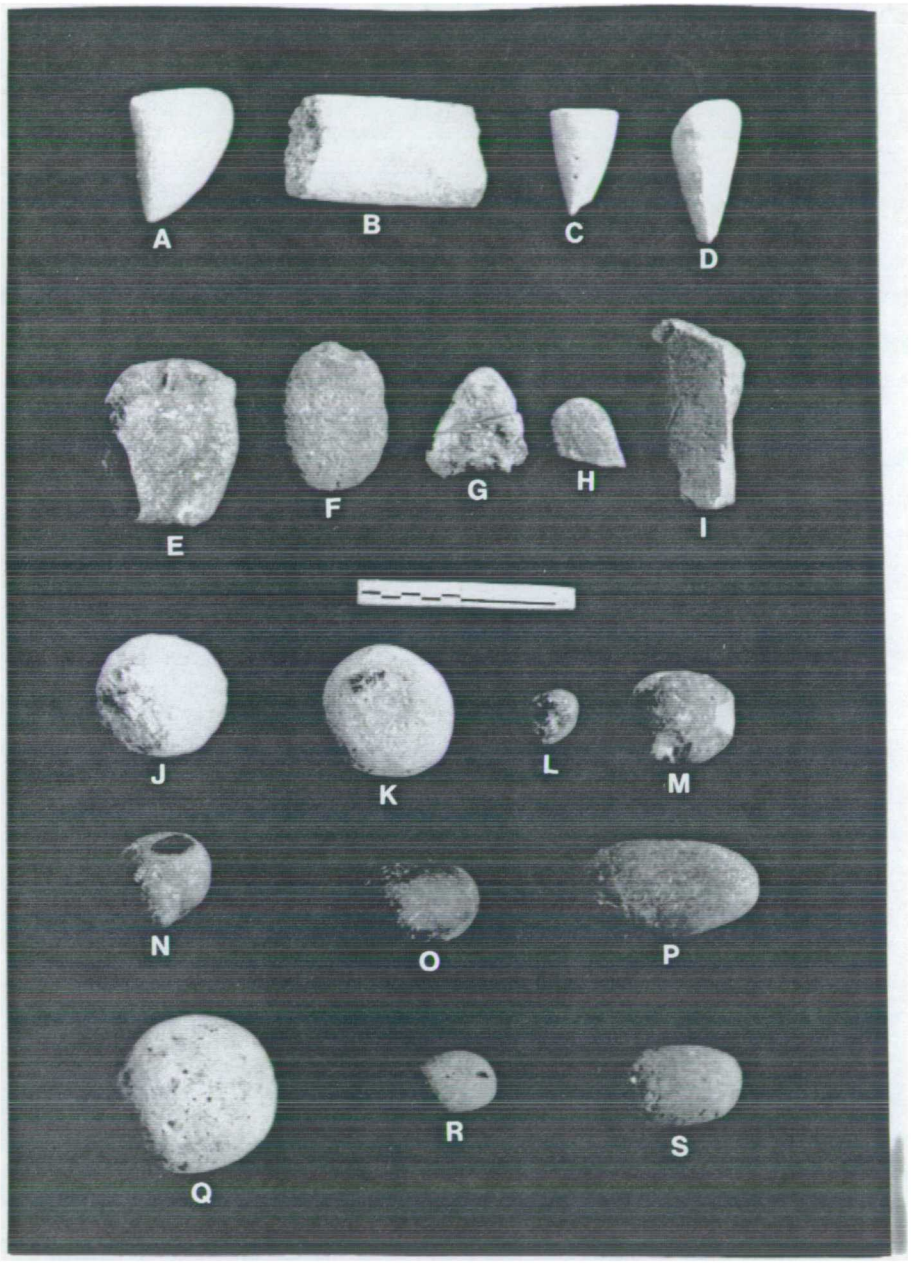


Figure III 110. Groundstone artefacts and lithic manufacturing tools from Zubin (a) limestone triangulate (A1-SF 288), (b) limestone rectangulate (A1-SF 283), (c) limestone leg? (A1-SF 277), (d) limestone awl/chisel (A2-SF/13), (e) slate celt (A3-SF 7) (f) slate disk (C9-SF 56) (g) slate debitage (A4-SF 83) (h) slate frag (B8-SF 48), (i) slate wrench frag (A4-SF 136), (j) limestone pestle (A4-SF 116), (k) grinding/polishing stone (A4-SF/75), (l) grinding/polishing stone (C9-SF 61), (m) hammerstone (A1-SF 281); (n) hammerstone (A1-SF 293), (o) hammerstone (A1-SF/296), (p) hammerstone (A4-SF/141), (q) hammerstone (A2-SF 14), (r) hammerstone (B8-SF 55), (s) hammerstone (B6-SF 11)

Table III.46. Zubin groundstone assemblage by raw material and artefact type.

	ANDESITE	BASALT	GABBRO	GRANITE	GREENSTONE	JADEITE	LIMESTONE	QUARTZ MASSIVE	QUARTZITE	SLATE	SYENITE	TOTAL	PERCENTAGE
BEAD	0	0	0	0	0	169	2	0	0	0	0	171	57 97
PENDANT	0	0	0	0	0	0	0	0	0	1	0	1	0 34
EARPLUG FRAG	0	0	0	0	0	0	1	0	0	0	0	1	0 34
AWL	0	0	0	0	0	0	1	0	0	0	0	1	0 34
AWL/CH SEL	0	0	0	0	0	0	1	0	0	0	0	1	0 34
CELT	0	0	0	0	0	0	0	0	0	1	0	1	0 34
CELT FRAG	0	0	0	0	1	0	0	0	0	0	0	1	0 34
CELT OR MANO	1	0	0	0	0	0	0	0	0	0	0	1	0 34
MANO	0	0	0	1	0	0	0	0	0	0	0	1	0 34
MANO FRAG	1	1	0	23	0	0	1	3	0	0	0	29	9 83
METATE FRAG	1	1	1	36	0	0	1	1	1	0	1	43	14 58
GROOVED SPHERE	0	0	0	2	0	0	0	0	0	0	0	2	0 68
LEG?	0	0	0	0	0	0	1	0	0	0	0	1	0 34
DISK (BROKEN)	0	0	0	0	0	0	0	0	0	1	0	1	0 34
MOSAIC INLAY	0	0	0	0	0	8	0	0	0	0	0	8	2 71
PESTLE	0	0	0	0	0	0	0	0	1	0	0	1	0 34
PESTLE?	0	0	0	0	0	0	1	0	0	0	0	1	0 34
SPINDLE WHORL	0	0	0	0	0	0	3	0	0	0	0	3	1 02
SPINDLE WHORL (CARVED)	0	0	0	0	0	0	1	0	0	0	0	1	0 34
BROKEN SPINDLE WHORL	0	0	0	0	0	0	1	0	0	0	0	1	0 34
RECTANGULATE	0	0	0	0	0	0	1	0	0	0	0	1	0 34
TRIANGULATE	0	0	0	0	16	0	1	0	0	0	0	17	5 76
WRENCH FRAG	0	0	0	0	0	0	0	0	0	2	0	2	0 68
MODIFIED PEBBLE	0	0	0	0	3	0	0	0	0	0	0	3	1 02
WORKED FRAG	0	0	0	0	0	0	0	0	0	1	0	1	0 34
DEBITAGE (SAWN)	0	0	0	0	0	0	0	0	0	1	0	1	0 34
TOTAL	3	2	1	62	17	177	16	4	2	5	1	295	
PERCENTAGE	1 02	0 68	0 34	21 02	6 78	60 00	5 42	1 36	0 68	2 37	0 34		100%

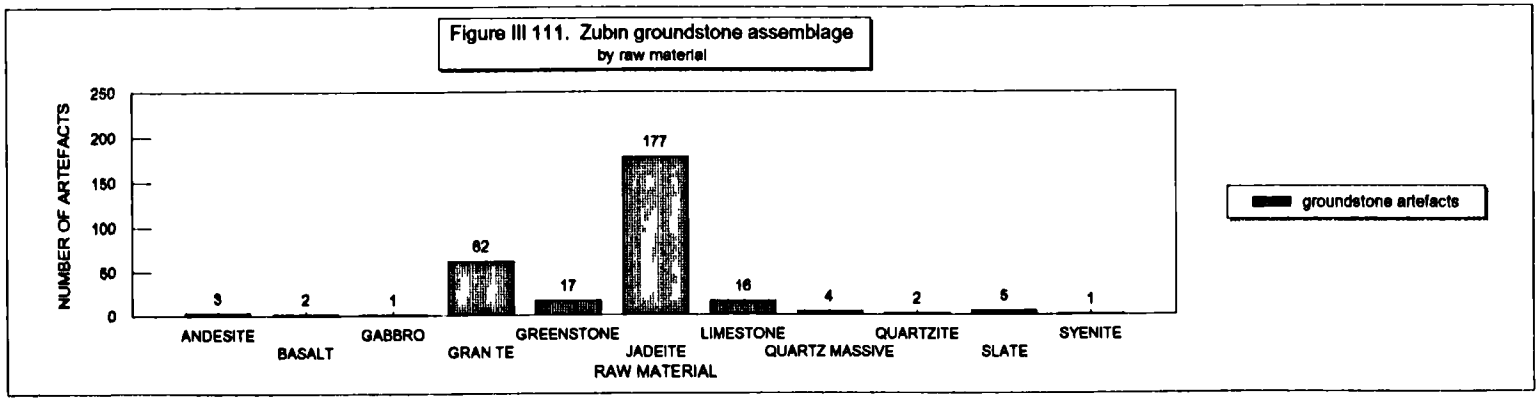


Table III.47. Zubin groundstone assemblage by artefact type and phase.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	XNIPEK	EARLY MAXIK	LATE MAXIK	MAXIK	MIXED	UNKNOWN	TOTAL	PERCENTAGE
BEAD	5	0	1	4	0	159	2	0	0	0	171	57 97
PENDANT	0	0	0	0	0	0	0	0	1	0	1	0 34
EARPLUG FRAG	0	0	0	0	0	1	0	0	0	0	1	0 34
AWL	0	0	1	0	0	0	0	0	0	0	1	0 34
AWL/CHISEL	0	0	1	0	0	0	0	0	0	0	1	0 34
CELT	0	0	1	0	0	0	0	0	0	0	1	0 34
CELT FRAG	0	0	0	0	0	0	1	0	0	0	1	0 34
CELT OR MANO	0	0	0	0	0	1	0	0	0	0	1	0 34
MANO	0	0	0	0	0	0	1	0	0	0	1	0 34
MANO FRAG	0	0	0	0	0	8	18	1	0	2	29	9 83
METATE FRAG	0	0	2	0	1	15	19	0	0	6	43	14 58
GROOVED SPHERE	0	0	0	0	0	0	1	0	0	1	2	0 68
LEG?	0	0	0	0	0	0	1	0	0	0	1	0 34
DISK (BROKEN)	0	0	0	0	0	0	0	0	1	0	1	0 34
INLAY	0	0	0	0	1	7	0	0	0	0	8	2 71
PESTLE	0	0	0	1	0	0	0	0	0	0	1	0 34
PESTLE?	0	0	0	0	0	1	0	0	0	0	1	0 34
SPINDLE WHORL	0	0	0	0	0	1	2	0	0	0	3	1 02
SPINDLE WHORL (CARVED)	0	0	0	0	0	1	0	0	0	0	1	0 34
BROKEN SPINDLE WHORL	0	0	0	0	0	0	1	0	0	0	1	0 34
RECTANGULATE	0	0	1	0	0	0	0	0	0	0	1	0 34
TRIANGULATE	5	1	0	10	0	1	0	0	0	0	17	5 76
WRENCH FRAG	0	0	0	0	0	2	0	0	0	0	2	0 68
MODIFIED PEBBLE	1	0	0	2	0	0	0	0	0	0	3	1 02
WORKED FRAG	0	0	0	0	0	0	0	1	0	0	1	0 34
DEBITAGE (SAWN)	0	0	0	0	0	1	0	0	0	0	1	0 34
TOTAL	10	1	7	15	2	197	46	1	2	9	295	
PERCENTAGE	3 73	0 34	2 37	5 76	0 68	67 12	15 59	0 68	0 68	3 05		100%

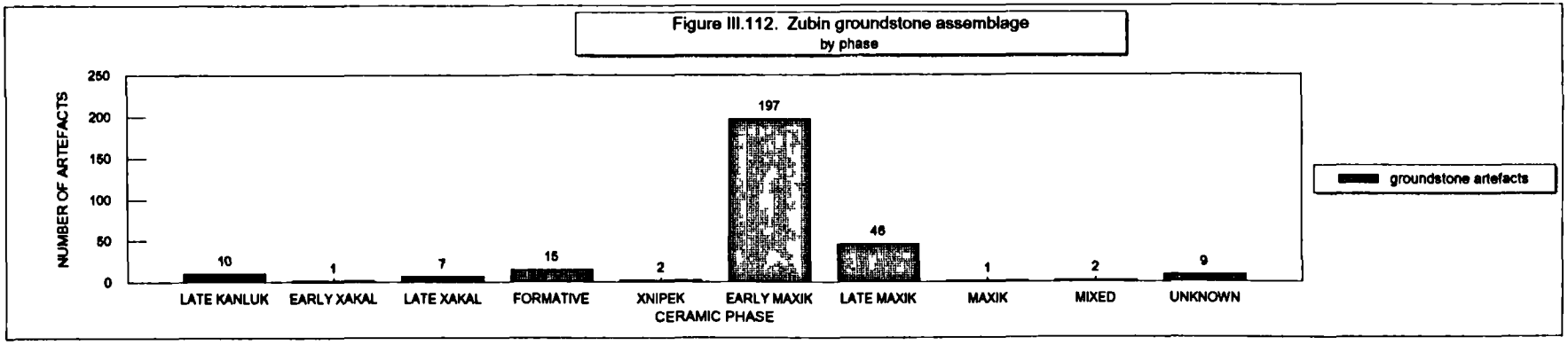


Table III.48. Zubin groundstone assemblage by artefact type and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	E12	F14	OP 100	OP 101	PLAZA B	TOTAL	PERCENTAGE
BEAD	161	0	1	0	0	9	0	0	0	0	0	0	171	57 97
PENDANT	0	0	0	0	0	1	0	0	0	0	0	0	1	0 34
EARPLUG FRAG	0	0	0	0	0	0	0	1	0	0	0	0	1	0 34
AWL	1	0	0	0	0	0	0	0	0	0	0	0	1	0 34
AWL/CHISEL	0	0	0	0	0	0	0	0	0	0	0	1	1	0 34
CELT	0	1	0	0	0	0	0	0	0	0	0	0	1	0 34
CELT FRAG	0	0	0	0	0	0	0	0	1	0	0	0	1	0 34
CELT OR MANO	1	0	0	0	0	0	0	0	0	0	0	0	1	0 34
MANO	1	0	0	0	0	0	0	0	0	0	0	0	1	0 34
MANO FRAG	2	1	13	3	5	0	1	1	1	1	0	1	29	9 83
METATE FRAG	6	0	12	0	11	1	0	10	1	0	0	2	43	14 58
GROOVED SPHERE	0	0	0	1	0	0	0	0	1	0	0	0	2	0 68
LEG?	1	0	0	0	0	0	0	0	0	0	0	0	1	0 34
DISK (BROKEN)	0	0	0	0	0	1	0	0	0	0	0	0	1	0 34
INLAY	7	0	1	0	0	0	0	0	0	0	0	0	8	2 71
PESTLE	0	0	0	0	0	1	0	0	0	0	0	0	1	0 34
PESTLE?	0	0	1	0	0	0	0	0	0	0	0	0	1	0 34
SPINDLE WHORL	1	0	1	0	0	0	0	0	0	0	1	0	3	1 02
SPINDLE WHORL (CARVED)	0	0	1	0	0	0	0	0	0	0	0	0	1	0 34
BROKEN SPINDLE WHORL	0	0	0	0	0	0	0	0	1	0	0	0	1	0 34
RECTANGULATE	1	0	0	0	0	0	0	0	0	0	0	0	1	0 34
TRIANGULATE	1	0	0	0	0	16	0	0	0	0	0	0	17	5 76
WRENCH FRAG	0	0	1	0	0	0	0	1	0	0	0	0	2	0 68
MODIFIED PEBBLE	0	0	0	0	0	3	0	0	0	0	0	0	3	1 02
WORKED FRAG	0	0	0	0	1	0	0	0	0	0	0	0	1	0 34
DEBITAGE (SAWN)	0	0	1	0	0	0	0	0	0	0	0	0	1	0 34
TOTAL	183	2	32	4	17	32	1	13	5	1	1	4	295	
PERCENTAGE	62 03	0 68	10 85	1 36	5 76	10 85	0 34	4 41	1 69	0 34	0 34	1 36		100%

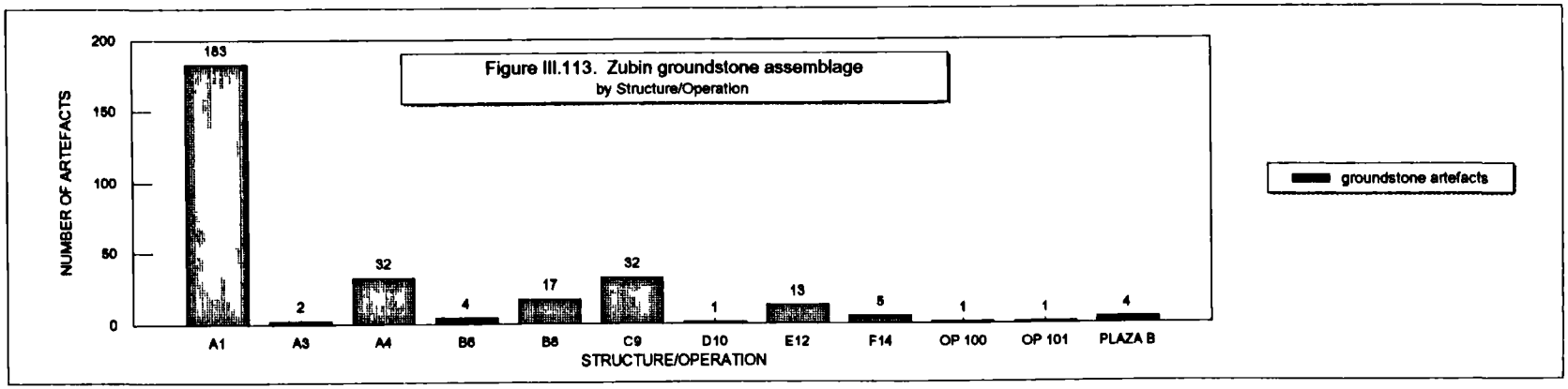
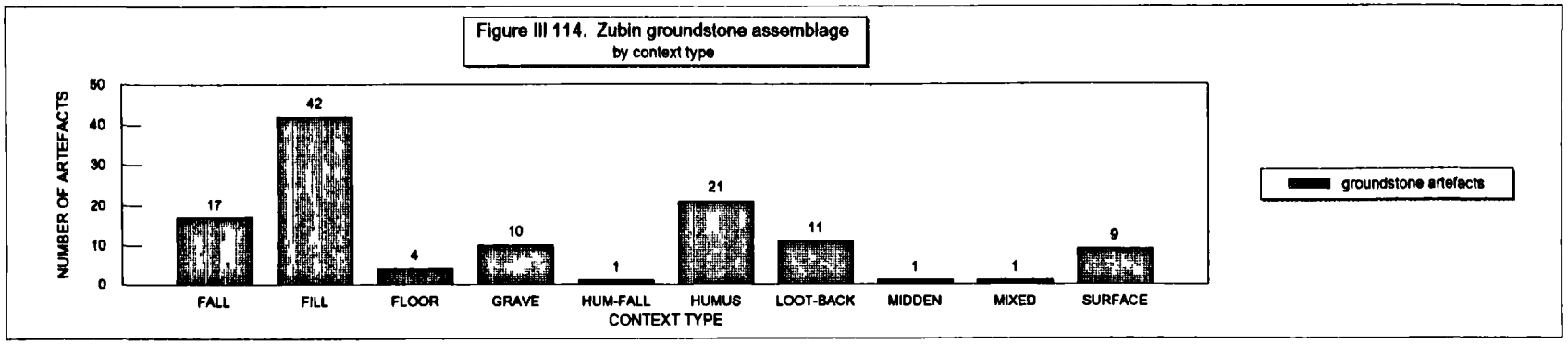


Table III.49. Zubin groundstone assemblage by artefact type and context type.

	FALL	FILL	FLOOR	GRAVE	HUM-FALL	HUMUS	LOOT-BACK	MIDDEN	MIXED	SURFACE	TOTAL	PERCENTAGE
BEAD	0	4	0	161	0	1	4	0	0	1	171	57 97
PENDANT	0	0	0	0	1	0	0	0	0	0	1	0 34
EARPLUG FRAG	0	1	0	0	0	0	0	0	0	0	1	0 34
AWL	0	1	0	0	0	0	0	0	0	0	1	0 34
AWL/CHISEL	0	1	0	0	0	0	0	0	0	0	1	0 34
CELT	0	1	0	0	0	0	0	0	0	0	1	0 34
CELT FRAG	0	1	0	0	0	0	0	0	0	0	1	0 34
CELT OR MANO	0	1	0	0	0	0	0	0	0	0	1	0 34
MANO	0	0	0	0	0	1	0	0	0	0	1	0 34
MANO FRAG	8	7	2	0	0	9	0	0	1	2	29	9 83
METATE FRAG	7	20	1	0	0	9	0	0	0	6	43	14 58
GROOVED SPHERE	1	0	0	0	0	0	0	0	0	1	2	0 68
LEG?	0	0	0	0	0	1	0	0	0	0	1	0 34
DISK (BROKEN)	0	0	0	0	1	0	0	0	0	0	1	0 34
INLAY	0	0	0	7	0	0	0	1	0	0	8	2 71
PESTLE	0	0	0	0	0	0	1	0	0	0	1	0 34
PESTLE?	0	0	1	0	0	0	0	0	0	0	1	0 34
SPINDLE WHORL	1	0	0	1	0	1	0	0	0	0	3	1 02
SPINDLE WHORL (CARVED)	0	1	0	0	0	0	0	0	0	0	1	0 34
BROKEN SPINDLE WHORL	0	1	0	0	0	0	0	0	0	0	1	0 34
RECTANGULATE	0	1	0	0	0	0	0	0	0	0	1	0 34
TRIANGULATE	0	5	0	2	0	0	10	0	0	0	17	5 76
WRENCH FRAG	0	2	0	0	0	0	0	0	0	0	2	0 68
MODIFIED PEBBLE	0	1	0	0	0	0	2	0	0	0	3	1 02
WORKED FRAG	0	0	0	0	0	0	0	0	1	0	1	0 34
DEBITAGE (SAWN)	0	1	0	0	0	0	0	0	0	0	1	0 34
TOTAL	17	42	4	10	1	21	11	1	1	9	295	
PERCENTAGE	5 76	16 61	1 36	57 97	0 68	7 46	5 76	0 34	0 68	3 39		100%

NOTE LOOT-BACK = LOOTER'S BACKDIRT



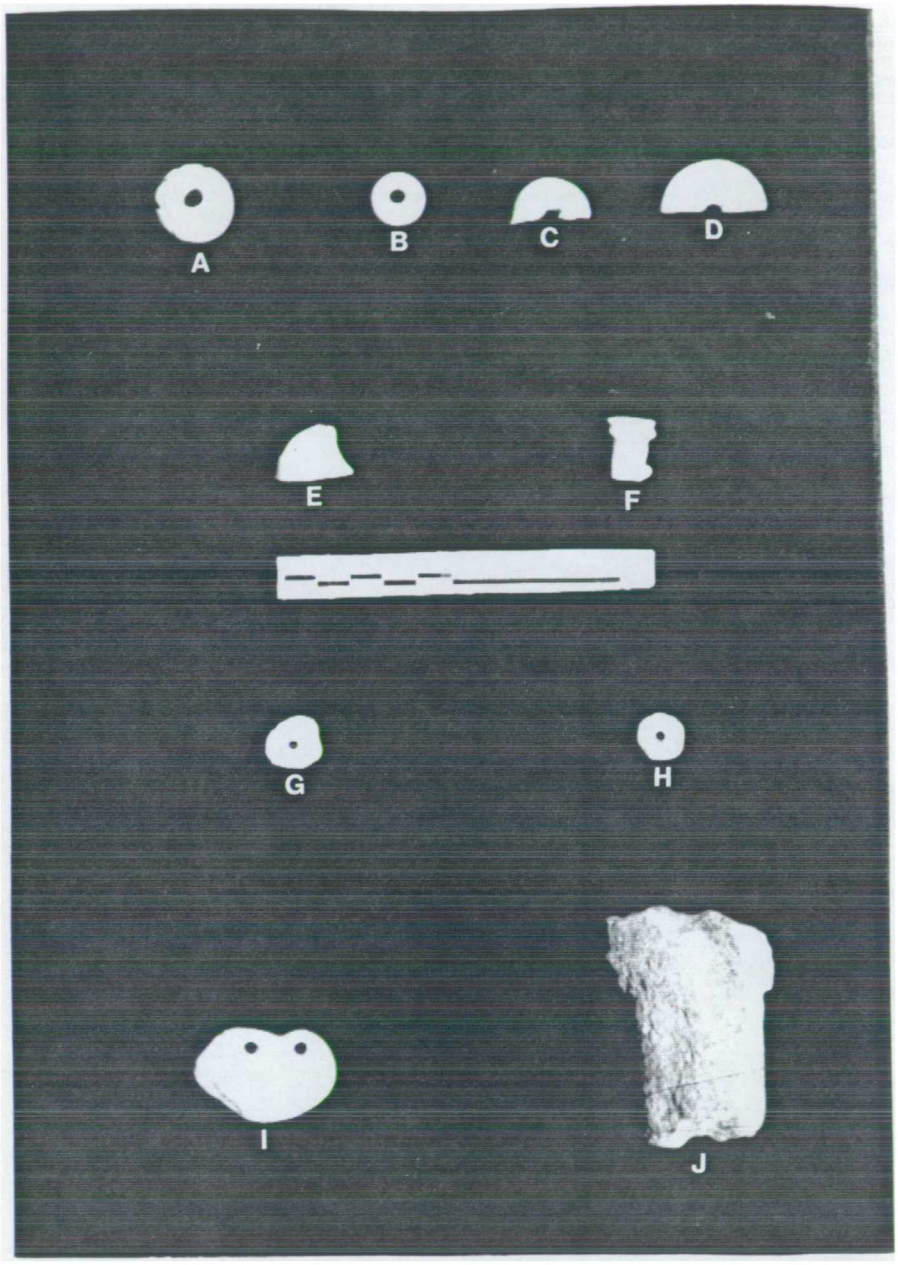
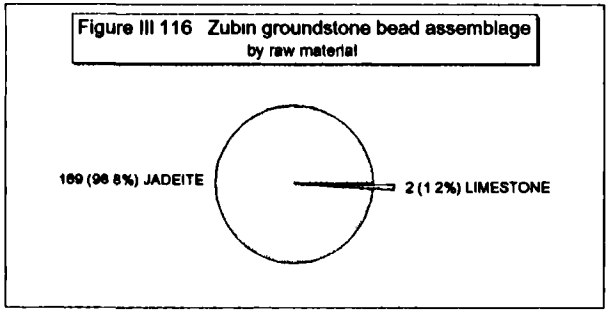
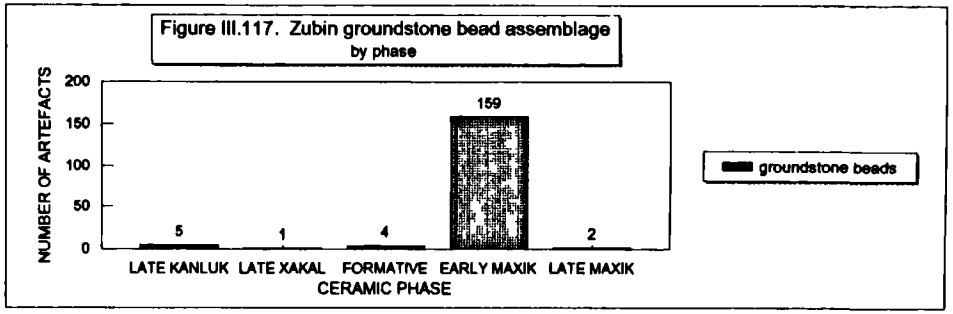


Figure III 115 Miscellaneous groundstone artefacts from Zubin (a) limestone spindle whorl (A4-SF 24), (b) limestone spindle whorl (A1-SF 57), (c) limestone spindle whorl (F14-SF 2), (d) limestone spindle whorl (A4-SF 11), (e) limestone spindle whorl (101-SF 2), (f) limestone earplug frag (E12-SF 3), (g) limestone bead (A1-SF/29), (h) limestone bead (A4-SF 9), (i) slate pendant (C9-SF 10), (j) slate wrench frag (E12-SF 4)

Table III.50. Zubin groundstone bead assemblage by raw material and phase.

	LATE KANLUK	LATE XAKAL	FORMATIVE	EARLY MAXIK	LATE MAXIK	TOTAL	PERCENTAGE
JADEITE	5	1	4	159	0	169	98.83
LIMESTONE	0	0	0	0	2	2	1.17
TOTAL	5	1	4	159	2	171	
PERCENTAGE	2 92	0 58	2.34	92.98	1.17		100%





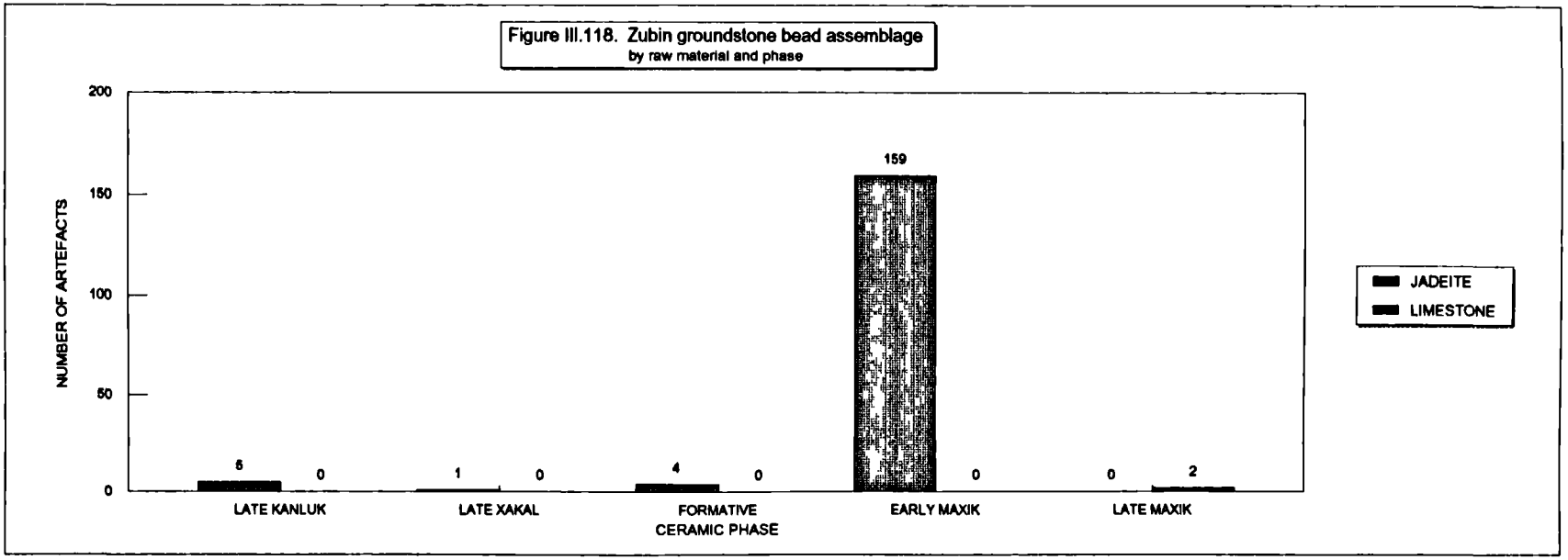
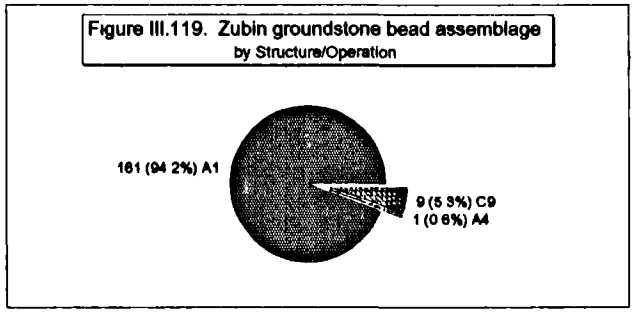


Table III.51. Zubin groundstone bead assemblage by raw material and Structure/Operation.

	A1	A4	C9	TOTAL	PERCENTAGE
JADEITE	160	0	9	169	98.83
LIMESTONE	1	1	0	2	1.17
TOTAL	161	1	9	171	
PERCENTAGE	94.15	0.58	5.26		100%



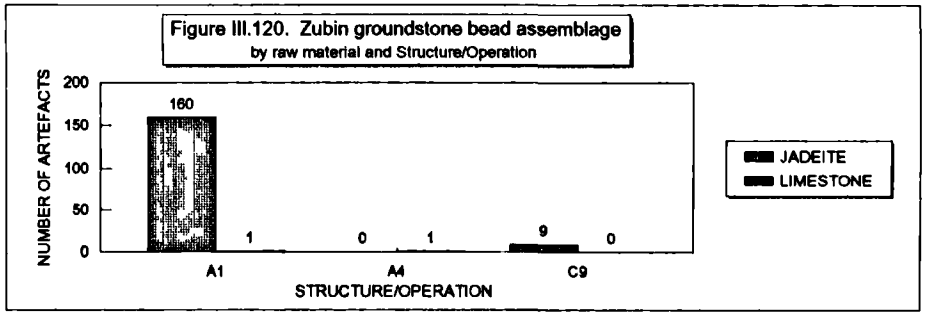
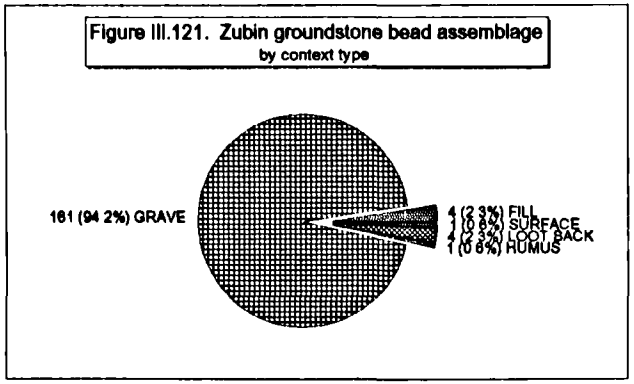


Table III.52. Zubin groundstone bead assemblage by raw material and context type.

	FILL	GRAVE	HUMUS	LOOT-BACK	SURFACE	TOTAL	PERCENTAGE
JADEITE	4	161	0	4	0	169	98.83
LIMESTONE	0	0	1	0	1	2	1.17
TOTAL	4	161	1	4	1	171	
PERCENTAGE	2.34	94.15	0.58	2.34	0.58		100%

NOTE: LOOT BACK = LOOTER'S BACKDIRT.



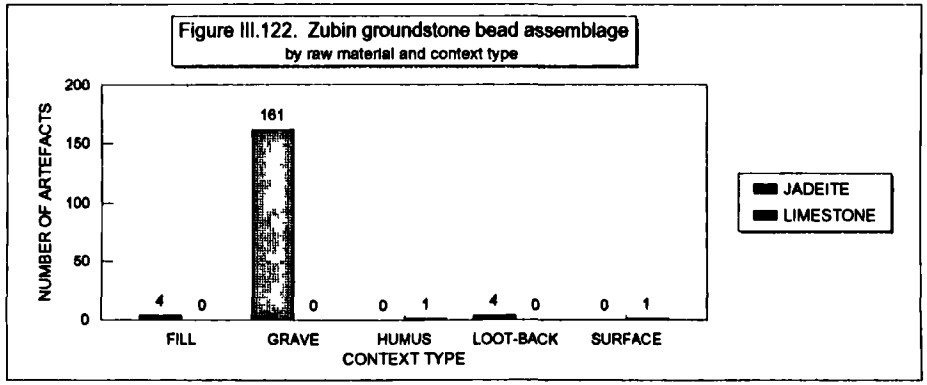
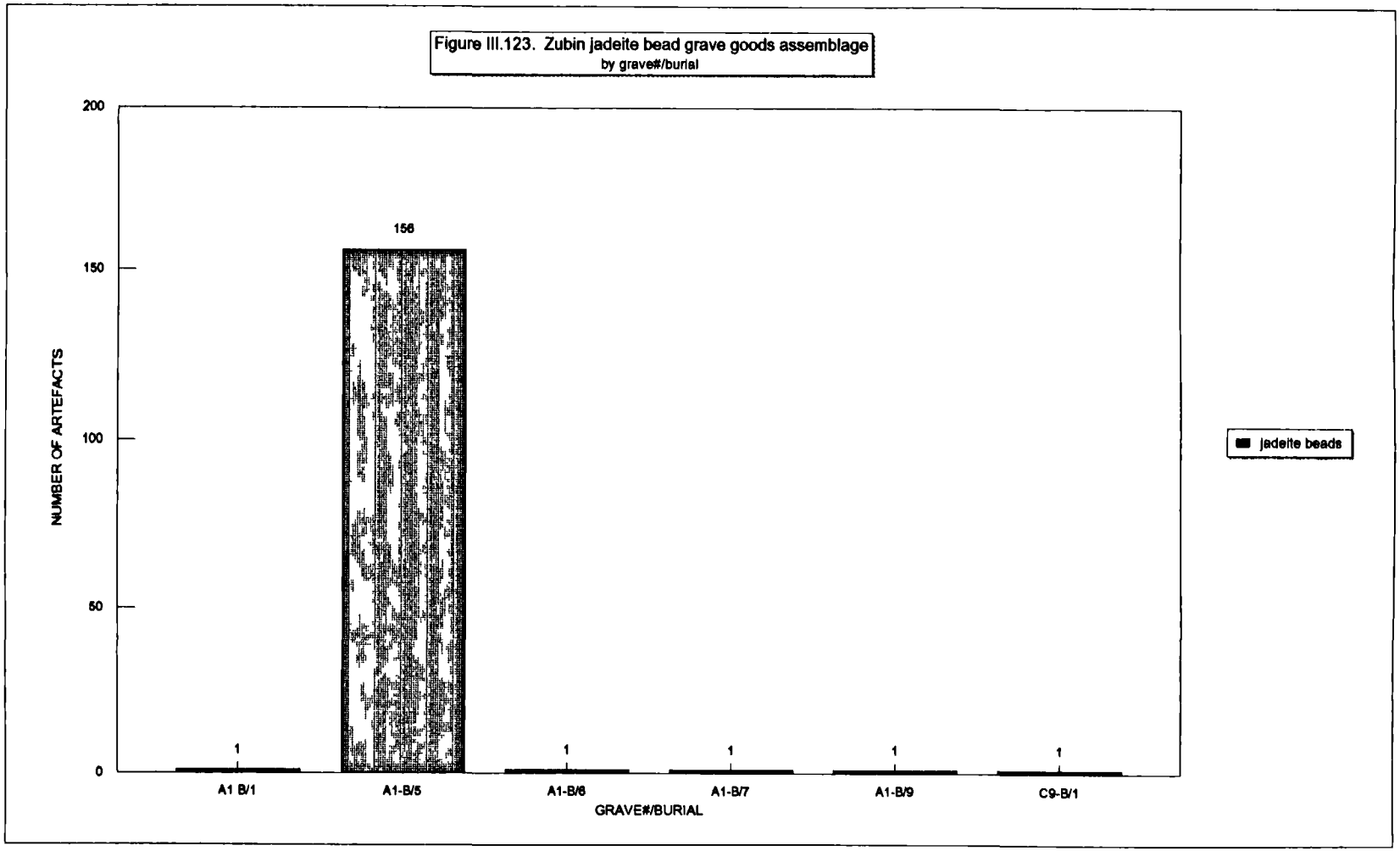


Table III.53. Zubin jadeite bead grave goods assemblage by raw material and grave#/burial.

	A1-B/1	A1 B/5	A1-B/6	A1-B/7	A1-B/9	C9-B/1	TOTAL	PERCENTAGE
TOTAL	1	156	1	1	1	1	161	
PERCENTAGE	0 62	96 89	0.62	0 62	0 62	0.62		100%



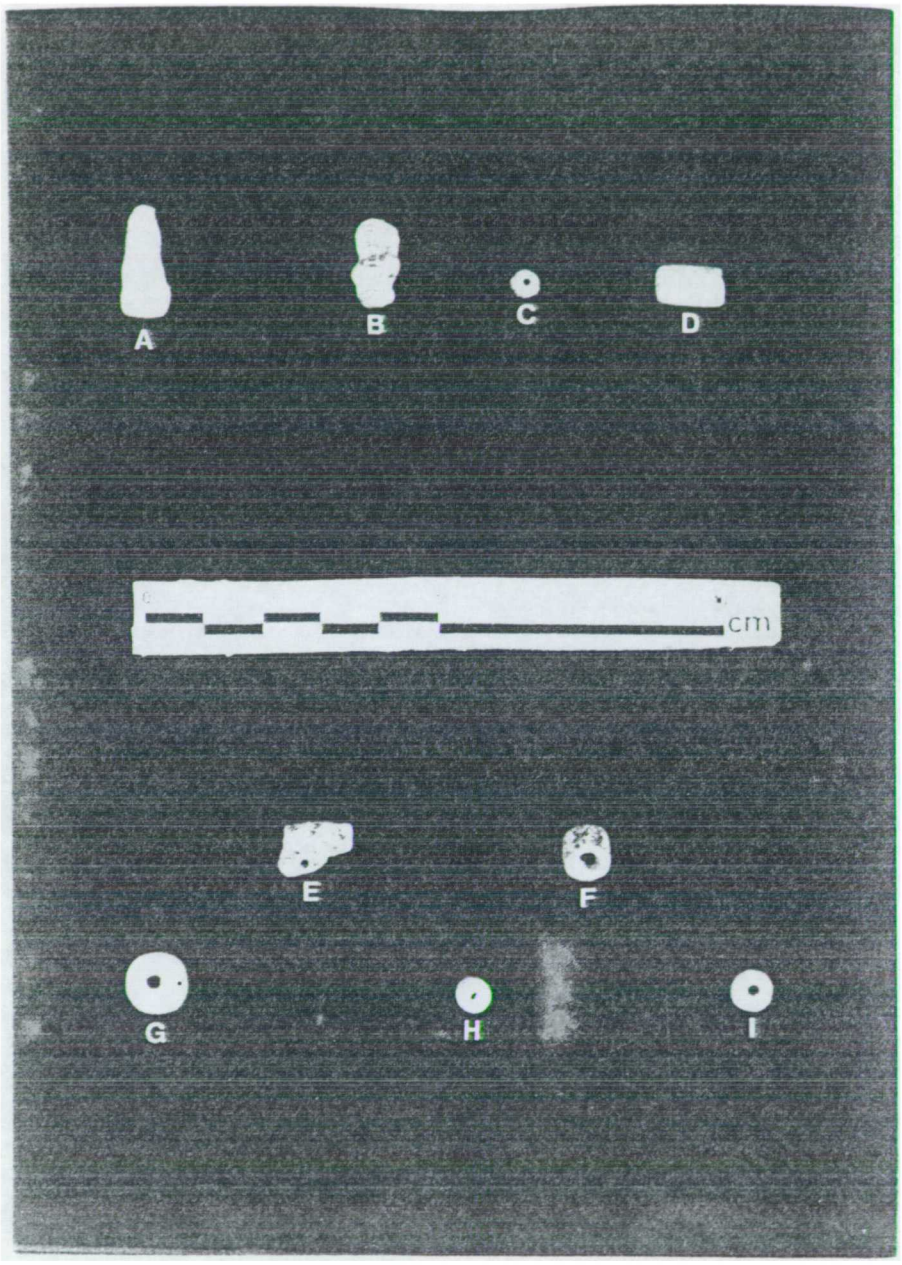


Figure III 124 Jadeite beads from Structure C9, Zubin (a) C9-SF 24, (b) C9-SF 25, (c) C9-SF 21, (d) C9-SF 22, (e) C9-SF 2, (f) C9-SF 3, (g) C9-SF 5, (h) C9-SF 23, (i) C9-SF 1

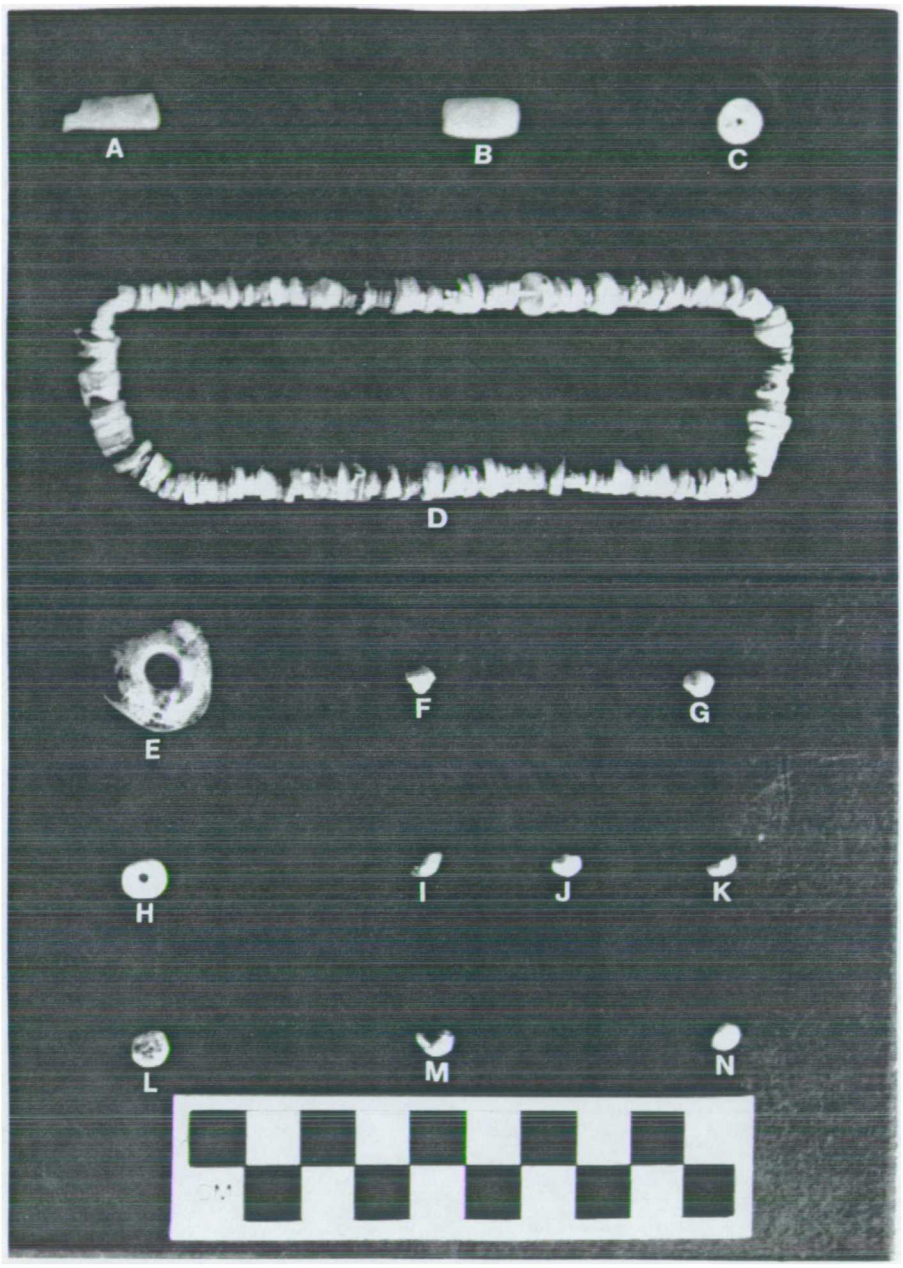
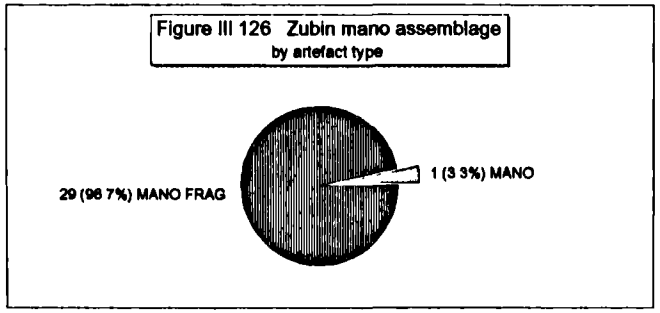
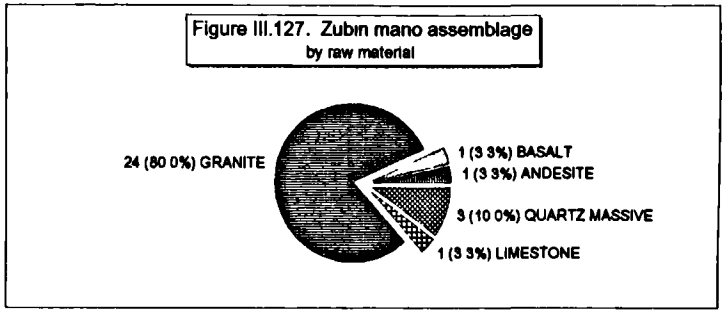


Figure III 125 Jadeite beads (a-e, h) and inlays (f , g, i-n) from the *Ac* courtyard, Zubin (a) A1-SF 9, (b) A1-SF 222, (c) A1-SF 223, (d) A1-SF 67-A1-SF 221, (e) A1-SF 56, (f) A1-SF 60, (g) A1-SF 61, (h) A1-SF 224, (i) A1-SF 62, (j) A1-SF 63, (k) A1-SF 64, (l) A4-SF 41, (m) A1-SF 65, (n) A1-SF/66

Table III.54. Zubin mano assemblage by artefact type and raw material.

	ANDESITE	BASALT	GRANITE	LIMESTONE	QUARTZ MASSIVE	TOTAL	PERCENTAGE
MANO	0	0	1	0	0	1	3.33
MANO FRAG	1	1	23	1	3	29	96.67
TOTAL	1	1	24	1	3	30	
PERCENTAGE	3 33	3.33	80.00	3.33	10.00		100%





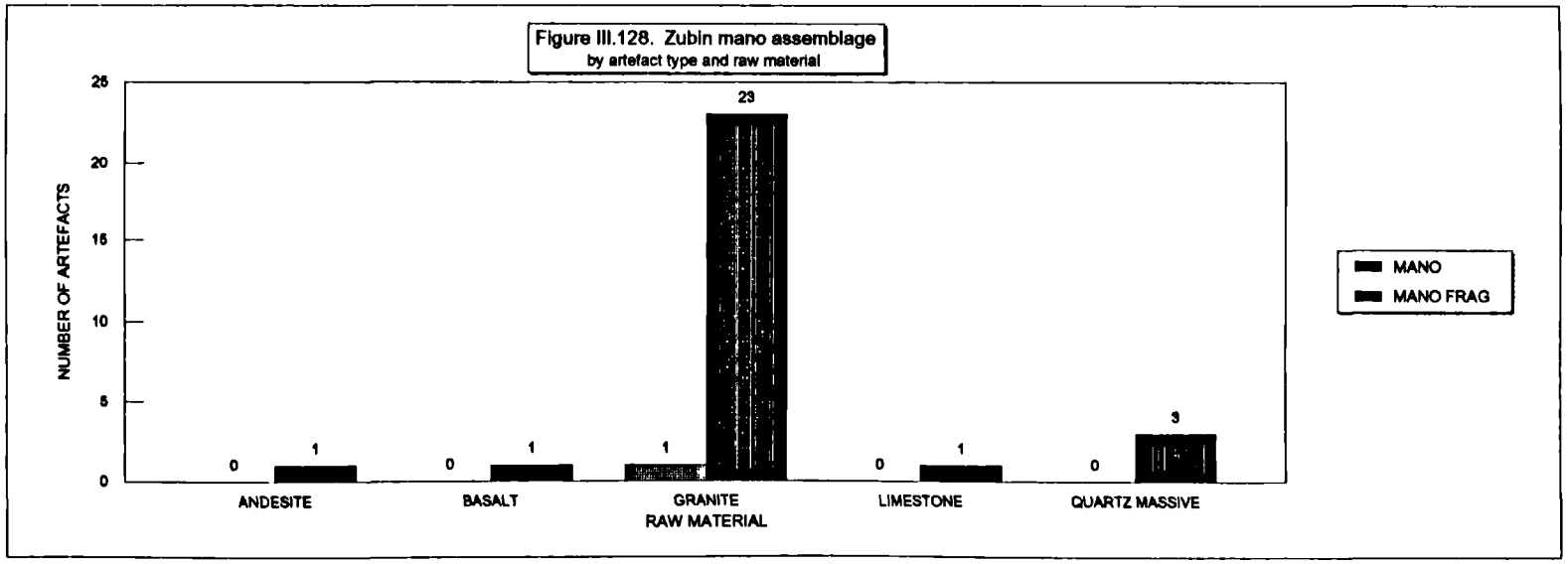
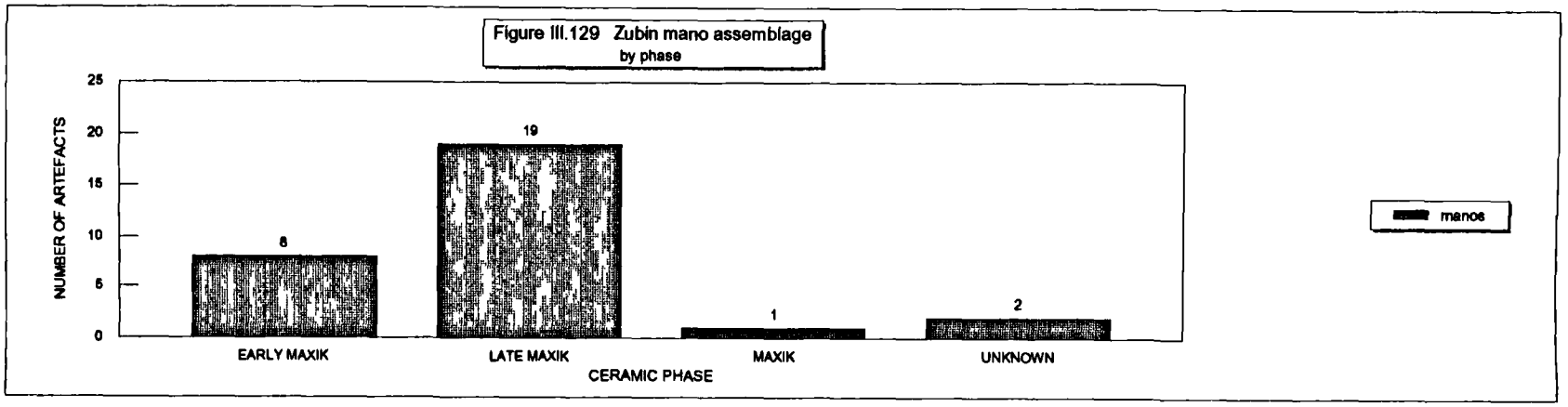


Table III.55. Zubin mano assemblage by artefact type and phase.

	EARLY MAXIK	LATE MAXIK	MAXIK	UNKNOWN	TOTAL	PERCENTAGE
MANO	0	1	0	0	1	3.33
MANO FRAG.	8	18	1	2	29	96.67
TOTAL	8	19	1	2	30	
PERCENTAGE	26.67	63.33	3.33	6.67		100%



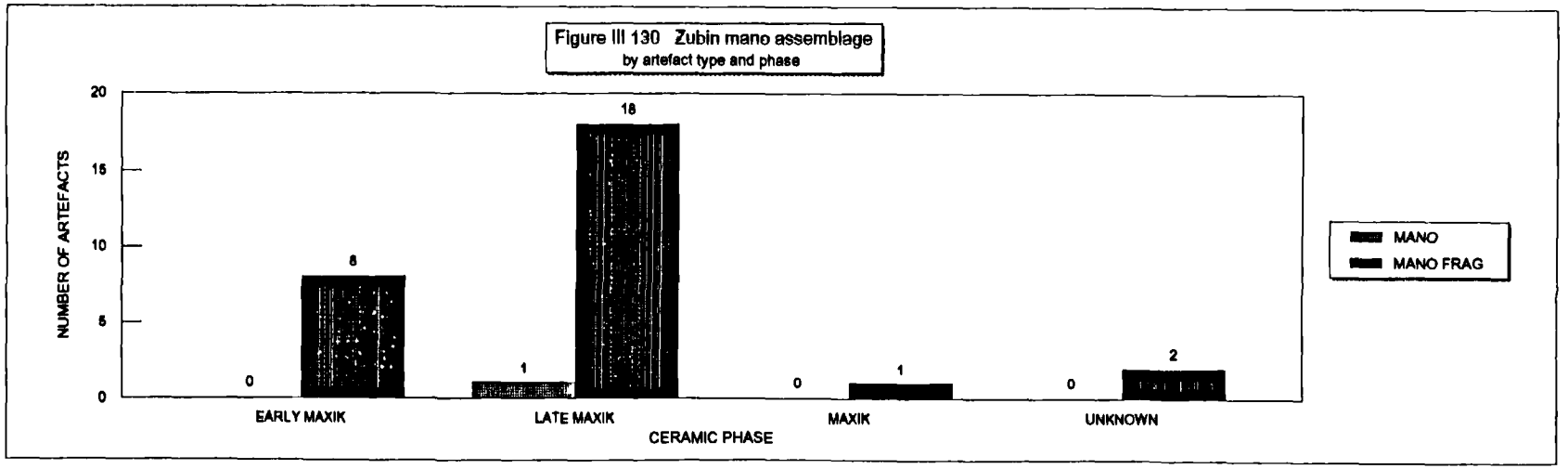
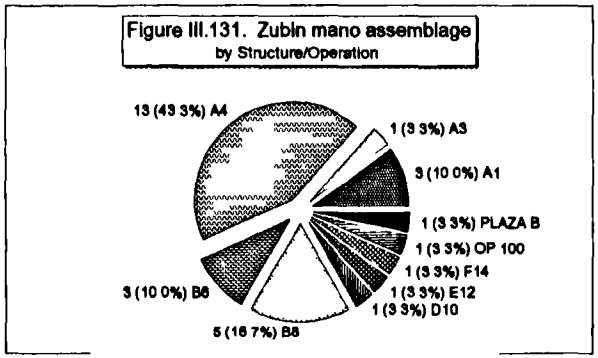


Table III.56. Zubin mano assemblage by artefact type and Structure/Operation.

	A1	A3	A4	B6	B8	D10	E12	F14	OP.100	PLAZA B	TOTAL	PERCENTAGE
MANO	1	0	0	0	0	0	0	0	0	0	1	3 33
MANO FRAG.	2	1	13	3	5	1	1	1	1	1	29	96 67
TOTAL	3	1	13	3	5	1	1	1	1	1	30	
PERCENTAGE	10 00	3.33	43.33	10.00	16.67	3.33	3.33	3.33	3.33	3.33		100%



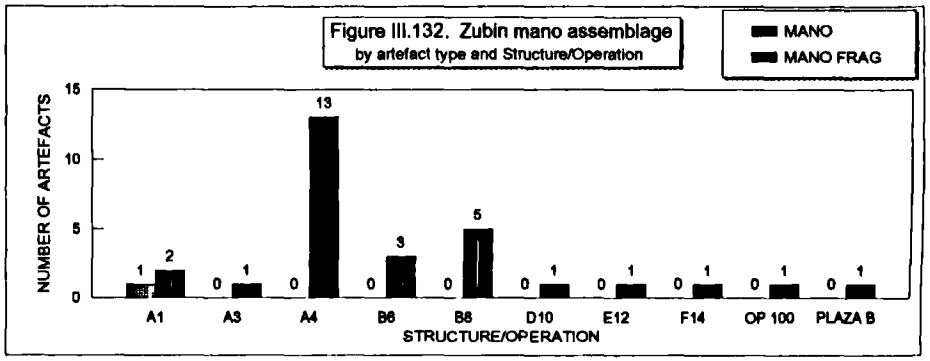
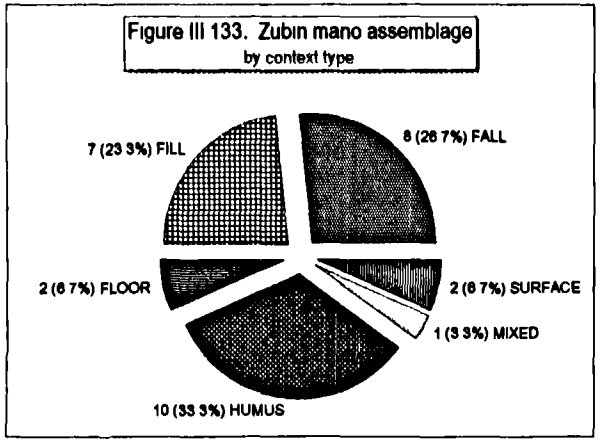
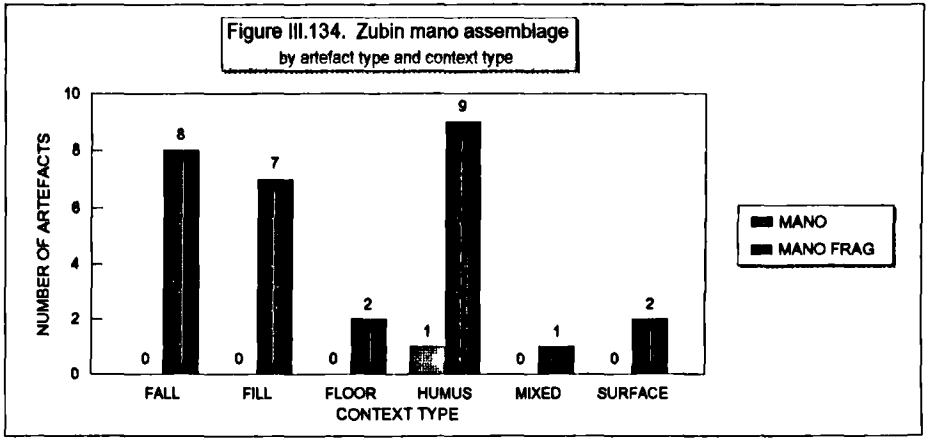


Table III.57. Zubin mano assemblage by artefact type and context type.

	FALL	FILL	FLOOR	HUMUS	MIXED	SURFACE	TOTAL	PERCENTAGE
MANO	0	0	0	1	0	0	1	3.33
MANO FRAG.	8	7	2	9	1	2	29	96.67
TOTAL	8	7	2	10	1	2	30	
PERCENTAGE	26 67	23 33	6.67	33.33	3.33	6.67		100%





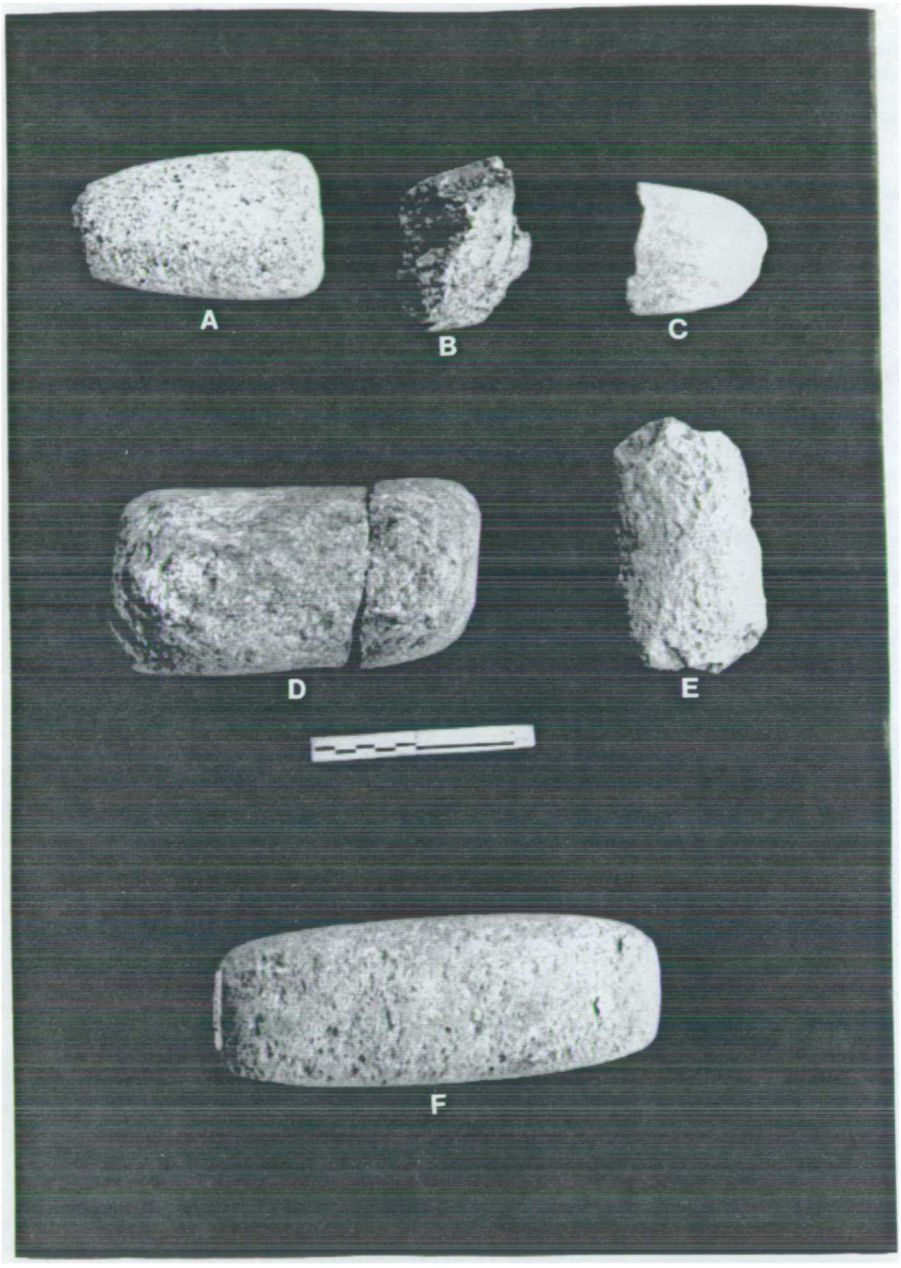


Figure III 135 Manos and mano fragments from Structures A1, A3, and Plaza B (A2), Zubin a) A3-SF 4, (b) A1-SF 282, (c) A1-SF 294, (d) A2-SF 16, (e) A1-SF 285, (f) A1-SF 268

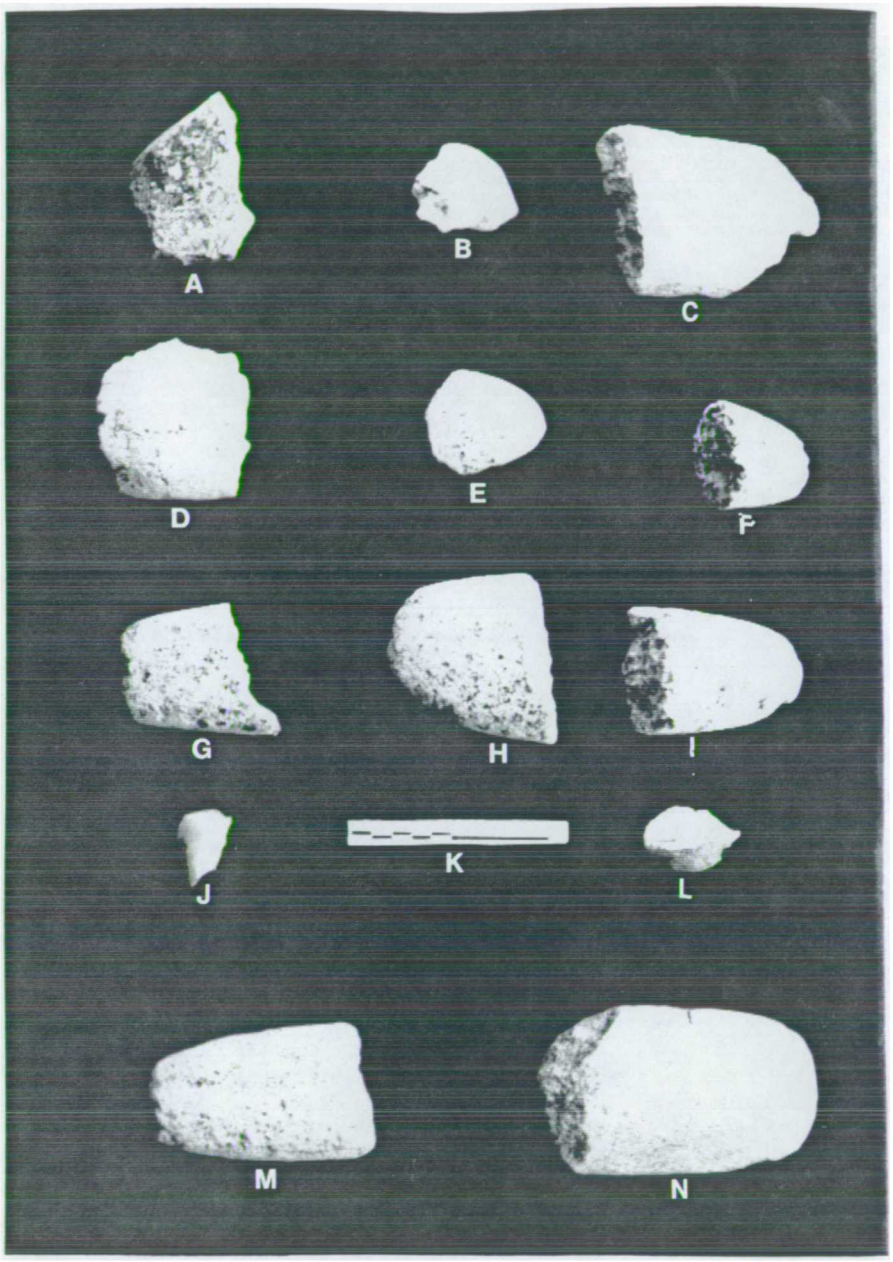


Figure III 136 Mano fragments from Structure A4, Zubin (a) A4-SF 115, (b) A4-SF 80, (c) A4-SF 112, (d) A4-SF 127, (e) A4-SF 120, (f) A4-SF 125, (g) A4-SF/117, (h A4-SF 84, (i) A4-SF 106, (j) A4-SF 109, (l) A4-SF 121, (m) A4-SF 130, (n A4-SF 55

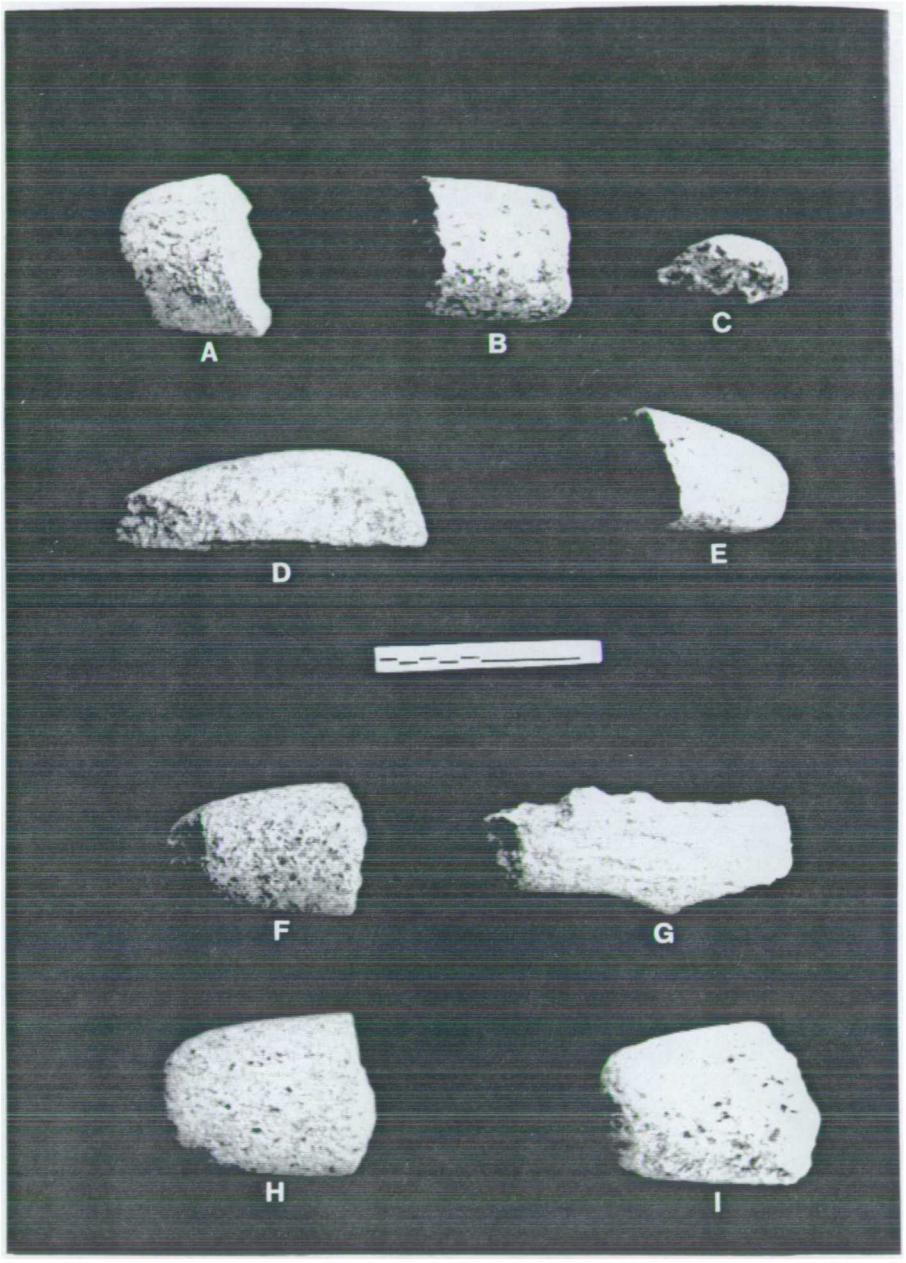


Figure III 137 Mano fragments from Structures B6 and B8, Zubin (a) B8-SF 35, (b) B8-SF 43, (c) B8-SF 60, (d) B8-SF 40, (e) B8-SF 36, (f) B6-SF 10, (g) B8-SF 41, (h) B6-SF 23, (i) B6-SF 13

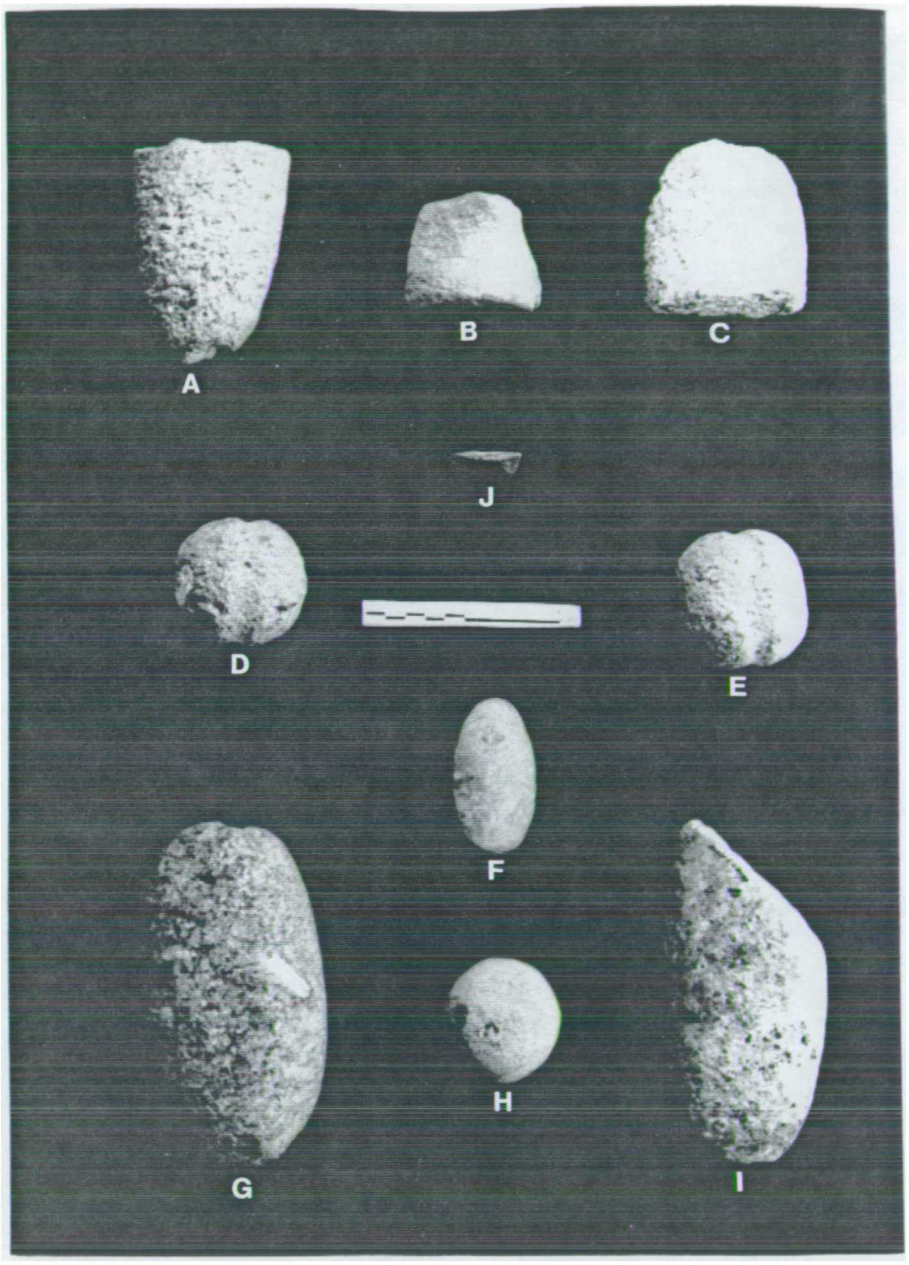
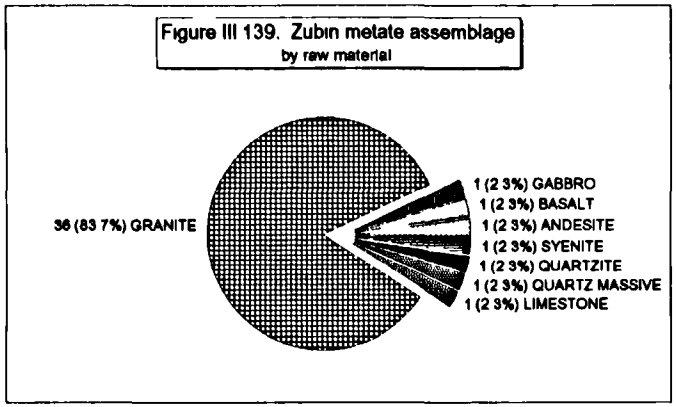
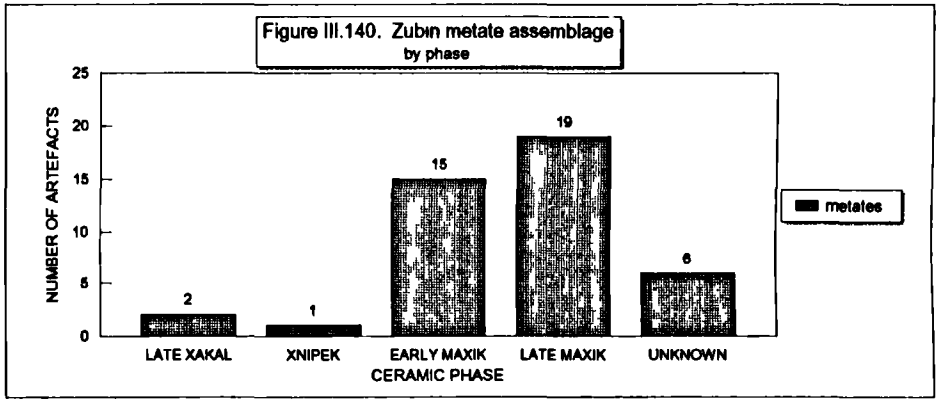


Figure III 138 Mano fragments from Structures D 0, C9, E12, F14, Operation 100, and other groundstone artefacts from Zubin (a) mano frag (D10-SF 8), (b) pestle (C9-SF 53), (c) mano frag (100-SF 2), (d) grooved sphere (B6-SF 18), (e) grooved sphere (F14-SF 24), (f) polished biface (A1-SF 269), (g) mano frag (F14-SF 11), (h) grinding/polishing stone (A4-SF 88), (i) mano frag (E12-SF 19), (j) celt frag (F14-SF 17)

Table III.58. Zubin metate assemblage by raw material.

	ANDESITE	BASALT	GABBRO	GRANITE	LIMESTONE	QUARTZ MASSIVE	QUARTZITE	SYENITE	TOTAL	PERCENTAGE
LATE XAKAL	0	0	0	0	0	1	0	1	2	4 65
XNIPEK	0	0	0	1	0	0	0	0	1	2 33
EARLY MAXIK	0	1	1	12	0	0	1	0	15	34 88
LATE MAXIK	1	0	0	17	1	0	0	0	19	44 19
UNKNOWN	0	0	0	6	0	0	0	0	6	13 95
TOTAL	1	1	1	36	1	1	1	1	43	
PERCENTAGE	2 33	2 33	2.33	83.72	2 33	2.33	2.33	2.33		100%





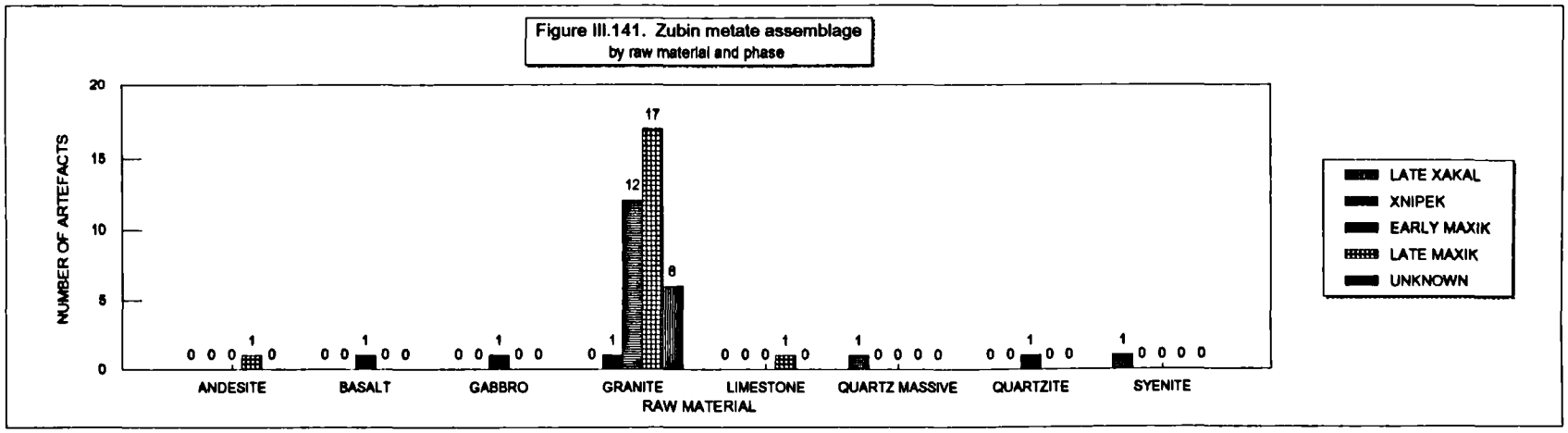


Table III 59 Zubin metate assemblage by raw material and Structure/Operation.

	ANDESITE	BASALT	GABBRO	GRANITE	LIMESTONE	QUARTZ MASSIVE	QUARTZITE	SYENITE	TOTAL	PERCENTAGE
A1	0	1	0	4	0	1	0	0	6	13 95
A4	0	0	0	11	0	0	1	0	12	27 91
B8	1	0	0	10	0	0	0	0	11	25.58
C9	0	0	0	0	0	0	0	1	1	2 33
E12	0	0	1	8	1	0	0	0	10	23 26
F14	0	0	0	1	0	0	0	0	1	2.33
PLAZA B	0	0	0	2	0	0	0	0	2	4 65
TOTAL	1	1	1	36	1	1	1	1	43	
PERCENTAGE	2.33	2 33	2.33	83.72	2.33	2.33	2 33	2.33		100%

Figure III 142. Zubin metate assemblage by Structure/Operation

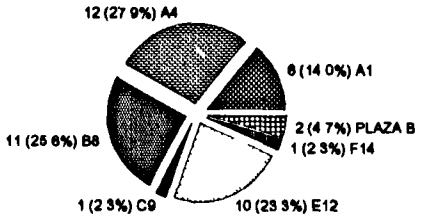


Figure III.143. Zubin metate assemblage by raw material and Structure/Operation

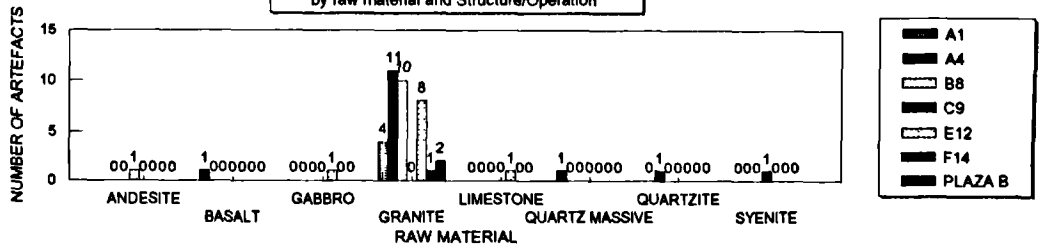


Table III.60. Zubin metate assemblage by raw material and context type.

	ANDESITE	BASALT	GABBRO	GRANITE	LIMESTONE	QUARTZ MASSIVE	QUARTZITE	SYENITE	TOTAL	PERCENTAGE
FALL	0	0	0	7	0	0	0	0	7	16 28
FILL	0	1	1	14	1	1	1	1	20	46 51
FLOOR	0	0	0	1	0	0	0	0	1	2 33
HUMUS	1	0	0	8	0	0	0	0	9	20 93
SURFACE	0	0	0	6	0	0	0	0	6	13.95
TOTAL	1	1	1	36	1	1	1	1	43	
PERCENTAGE	2 33	2.33	2.33	83.72	2.33	2.33	2.33	2.33		100%

Figure III 144 Zubin metate assemblage by context type

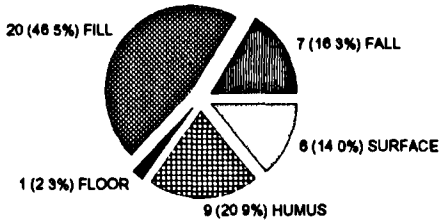
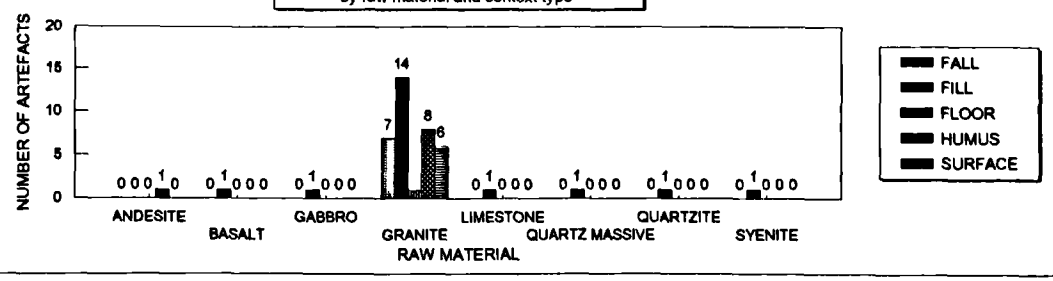


Figure III.145. Zubin metate assemblage by raw material and context type



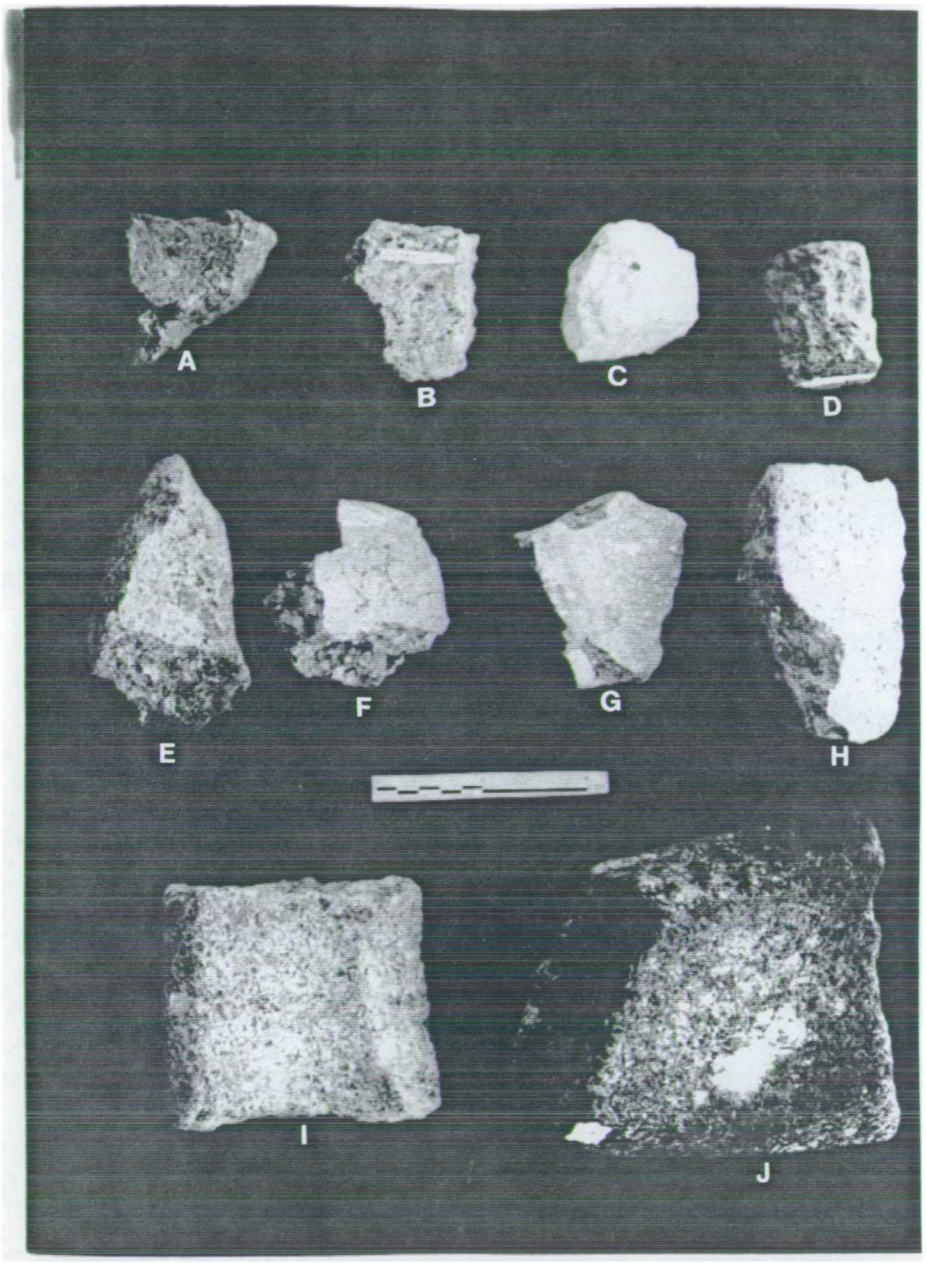


Figure III 146 Metate fragments from Structures A1, F14, C9, and Plaza B (A2), Zubin (a) A2-SF 15, (b) A1-SF 297, (c) A1-SF 289, (d) A1-SF 279, (e) A1-SF 267, (f) A1-SF 285, (g) A1-SF 286, (h) C9-SF 51, (i) A2-SF 2, (j) F14-SF 6

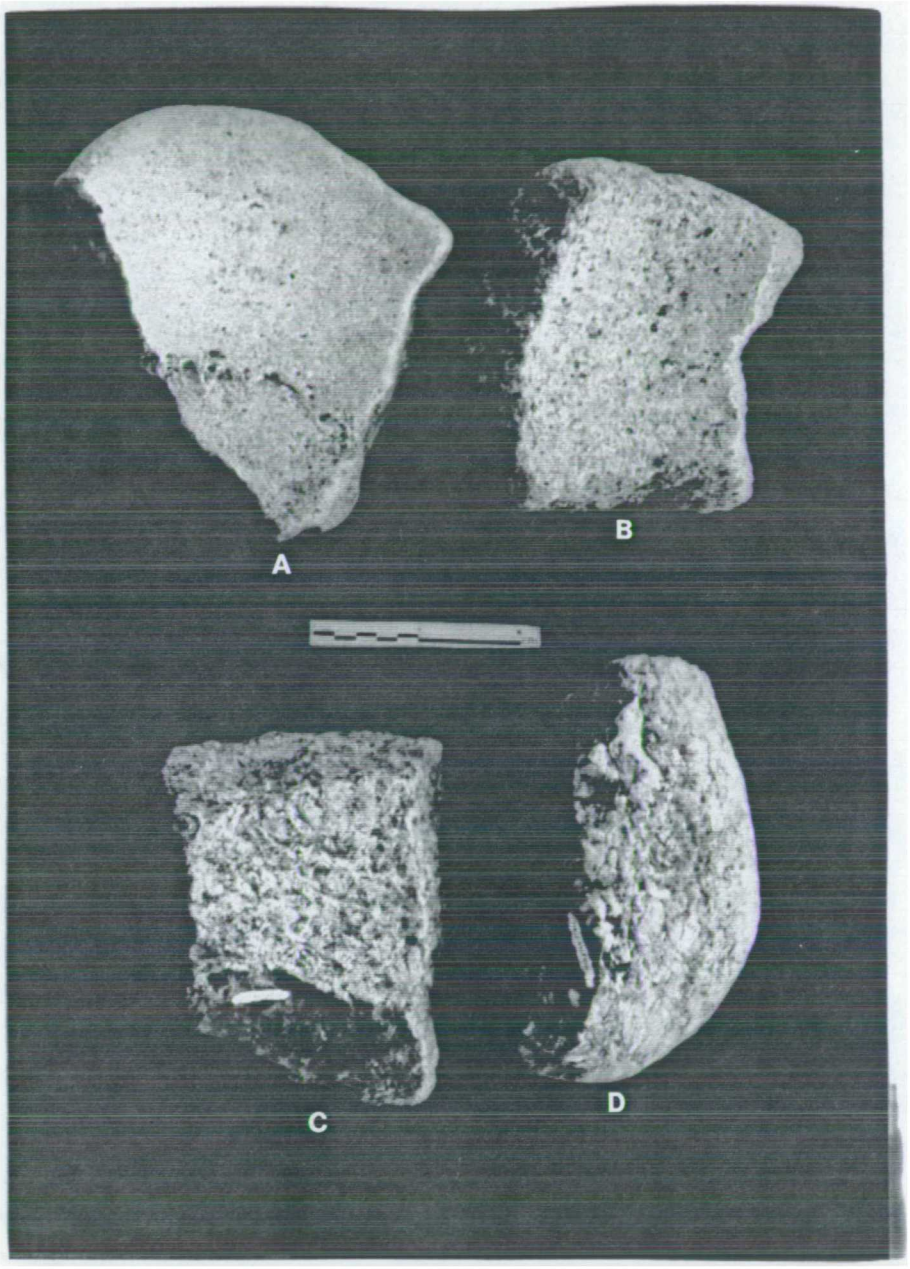


Figure III 147 Metate fragments from Structure A4, Zubin (a) A4-SF 73, (b) A4-SF 74, (c) A4-SF 78, (d) A4-SF 71

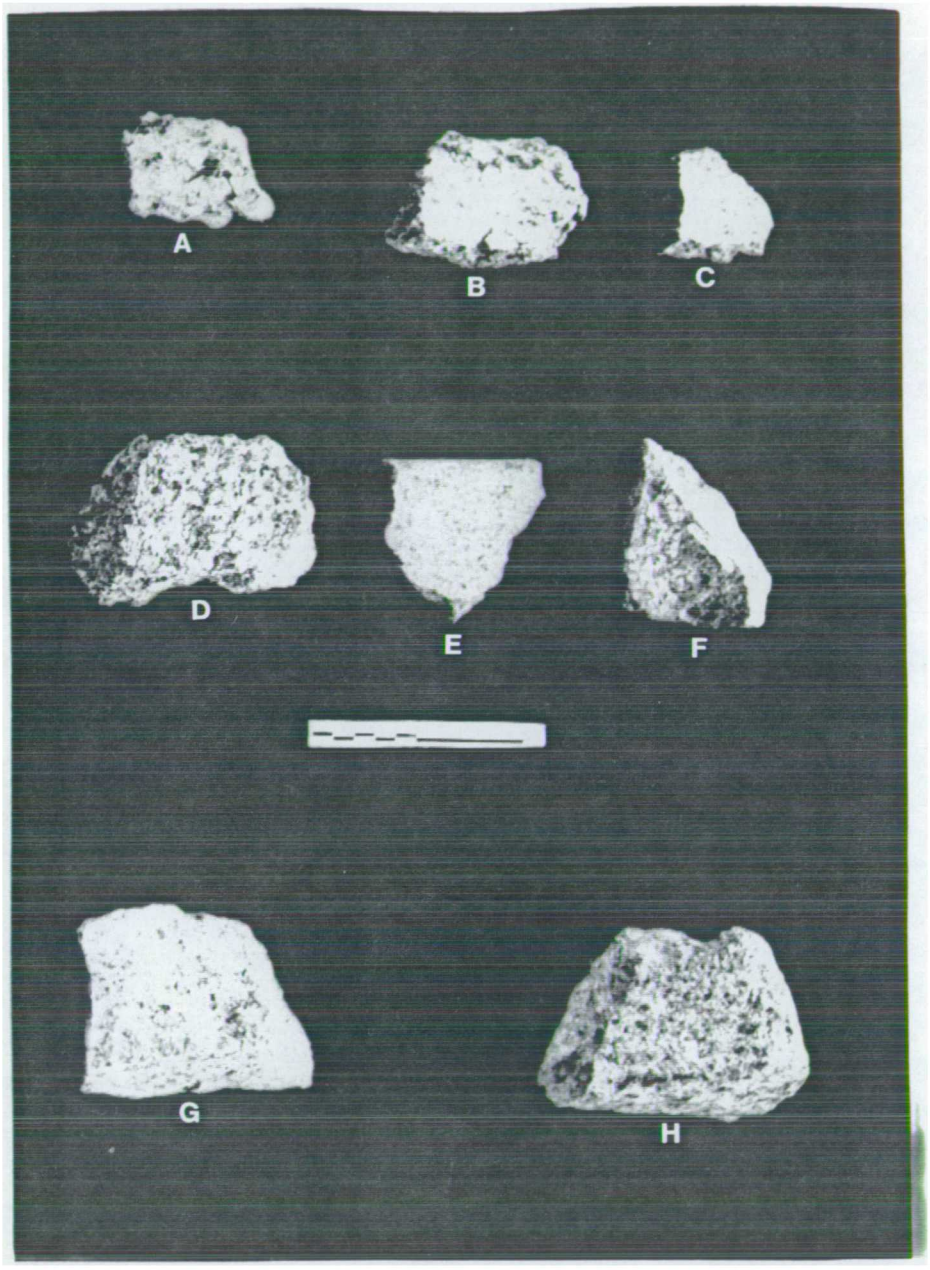


Figure III 148 Metate fragments from Structure A4, Zubin (a) A4-SF 139, (b) A4-SF 85, (c) A4-SF 81, (d) A4-SF 142, (e) A4-SF 99, (f) A4-SF 72, (g) A4-SF 135, (h) A4-SF 124

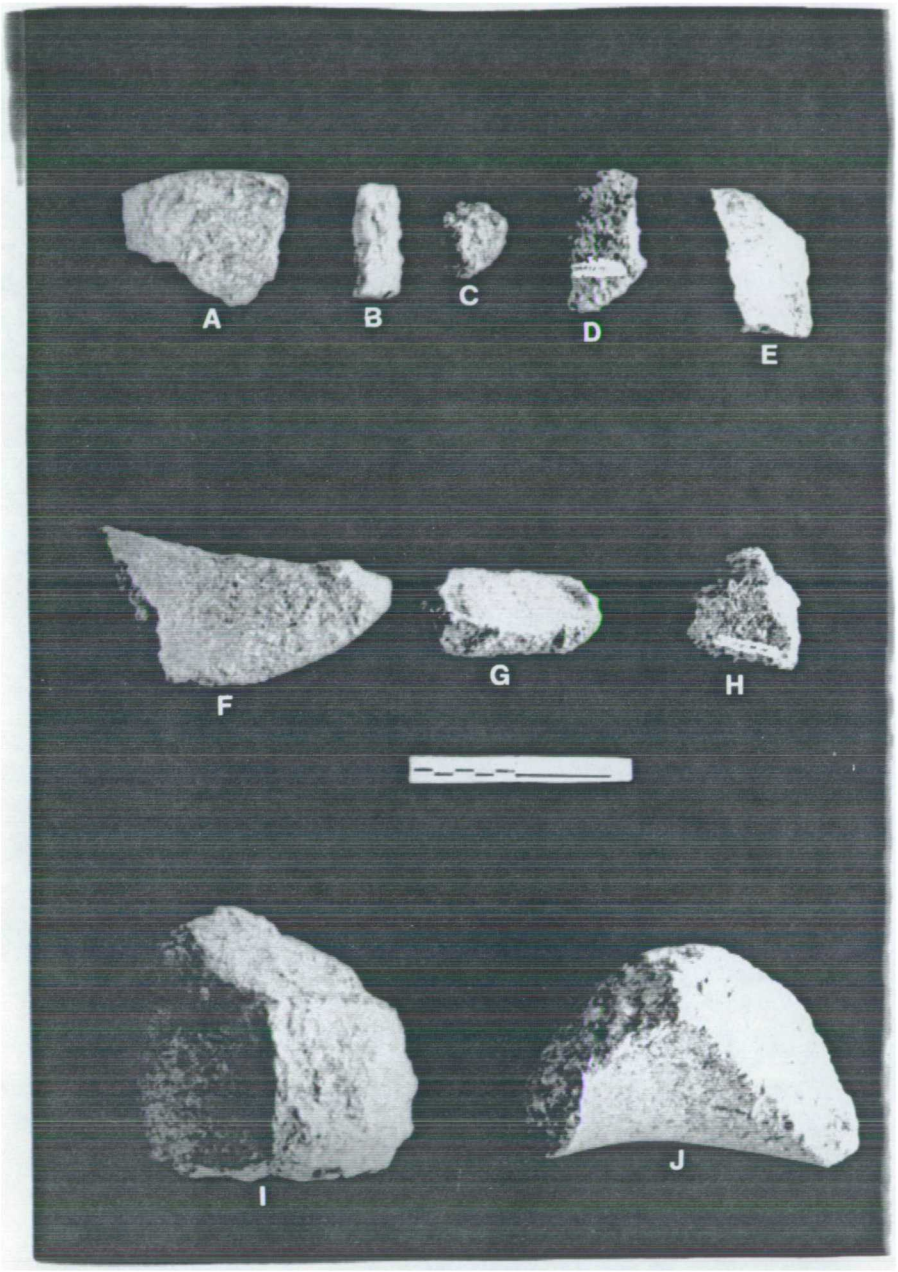


Figure III 149 Metate fragments from Structure B8, Zubin (a) B8-SF 57, (b) B8-SF 59, (c) B8-SF 58, (d) B8-SF 63, (e) B8-SF 45, (f) B8-SF 56, (g) B8-SF 44, (h) B8-SF 42, (i) B8-SF 34, (j) B8-SF 33

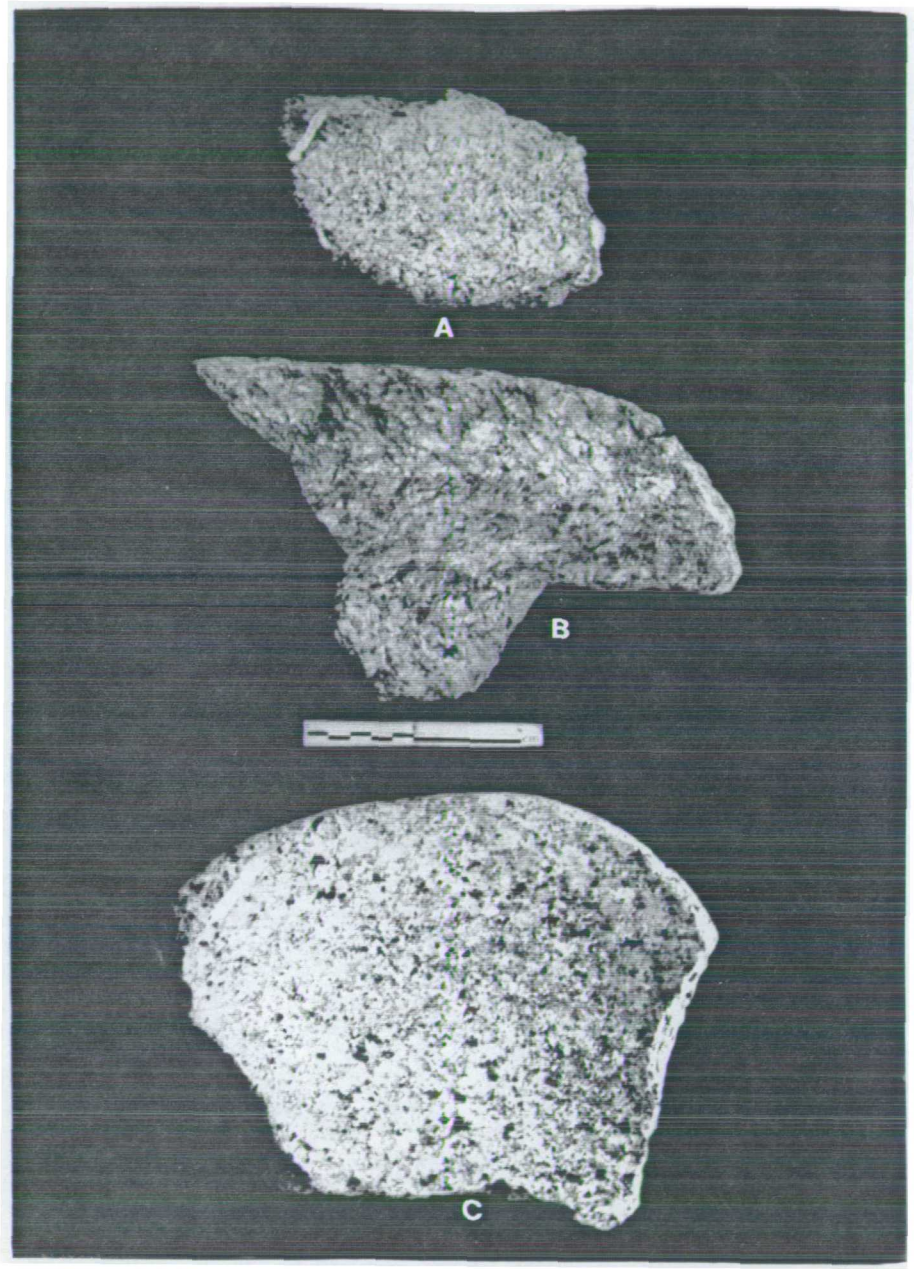


Figure III.150. Metate fragments from the Group E surface, Zubin (a) E12-SF 15, (b) E12-SF 9, (c) E12-SF 10

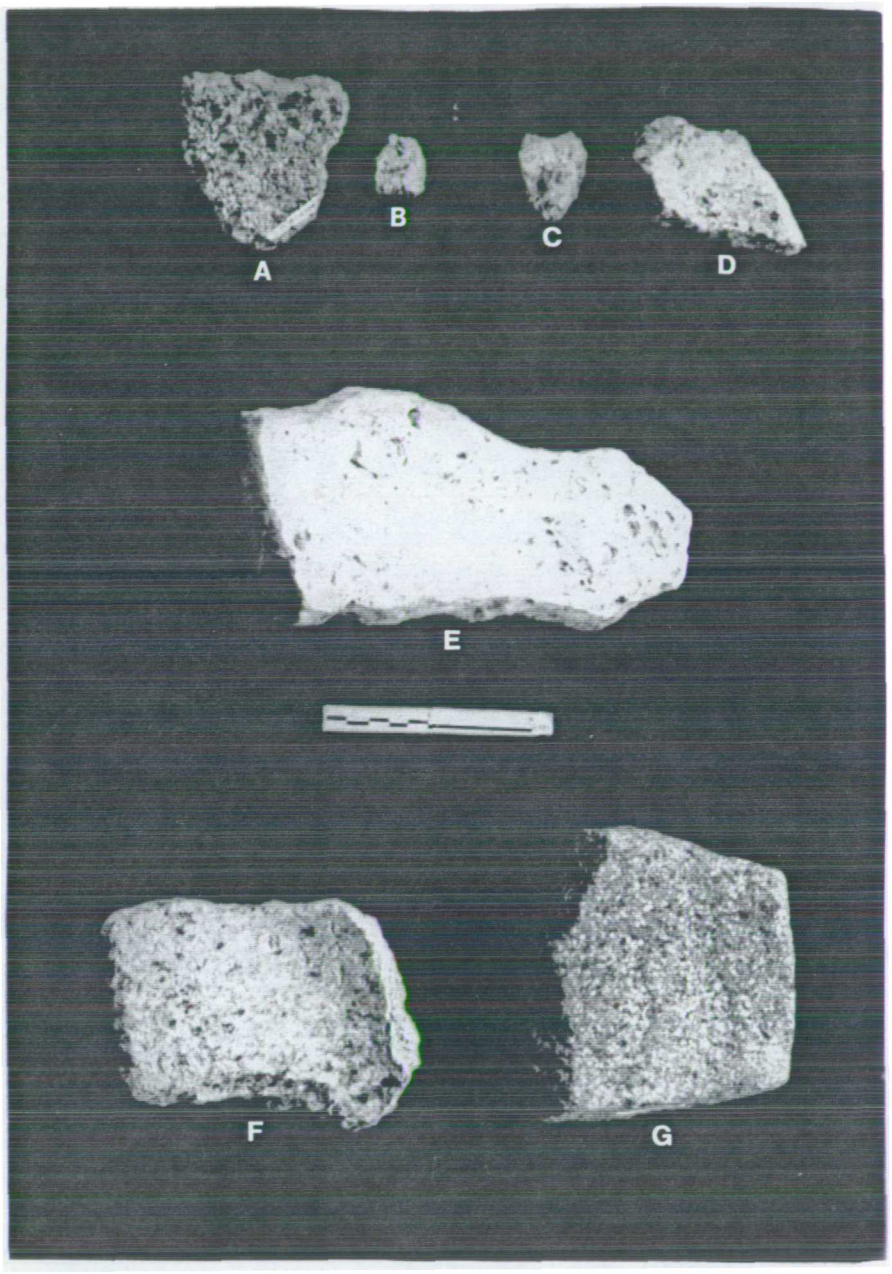
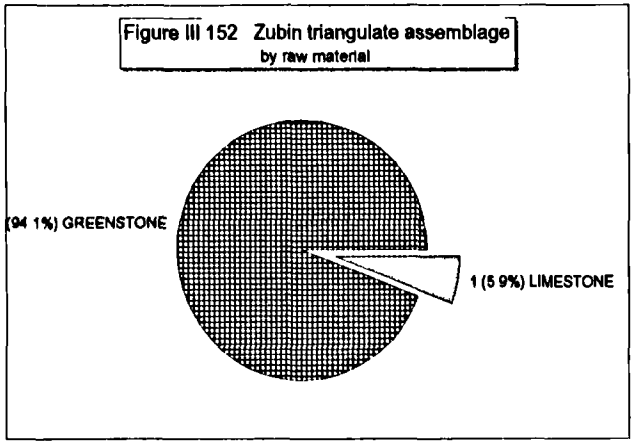
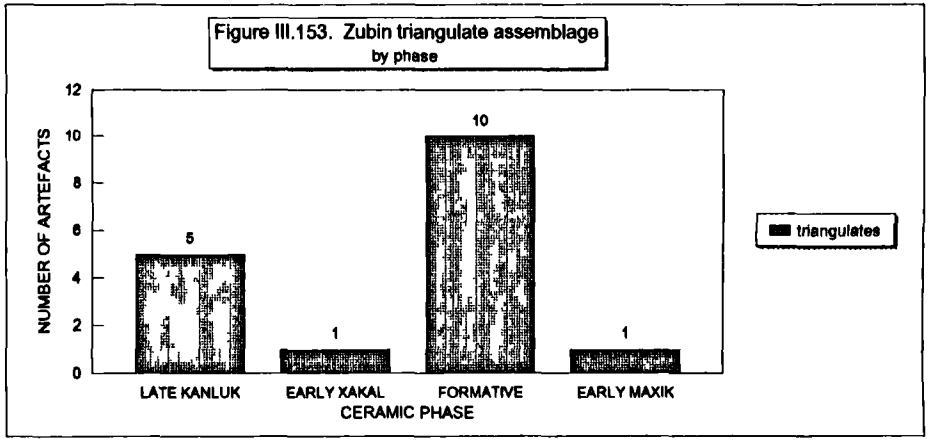


Figure III 151 Metate fragments from Group E, Zubin (a) E12-SF 25, (b) E12-SF 14, (c) E12-SF 13, (d) E12-SF 11, (e) E12-SF 8, (f) E12-SF 12, (g) E12-SF 22

Table III.61. Zubin triangulate assemblage by raw material and phase.

	LATE KANLUK	EARLY XAKAL	FORMATIVE	EARLY MAXIK	TOTAL	PERCENTAGE
GREENSTONE	5	1	10	0	16	94.12
LIMESTONE	0	0	0	1	1	5 88
TOTAL	5	1	10	1	17	
PERCENTAGE	29.41	5.88	58 82	5.88		100%





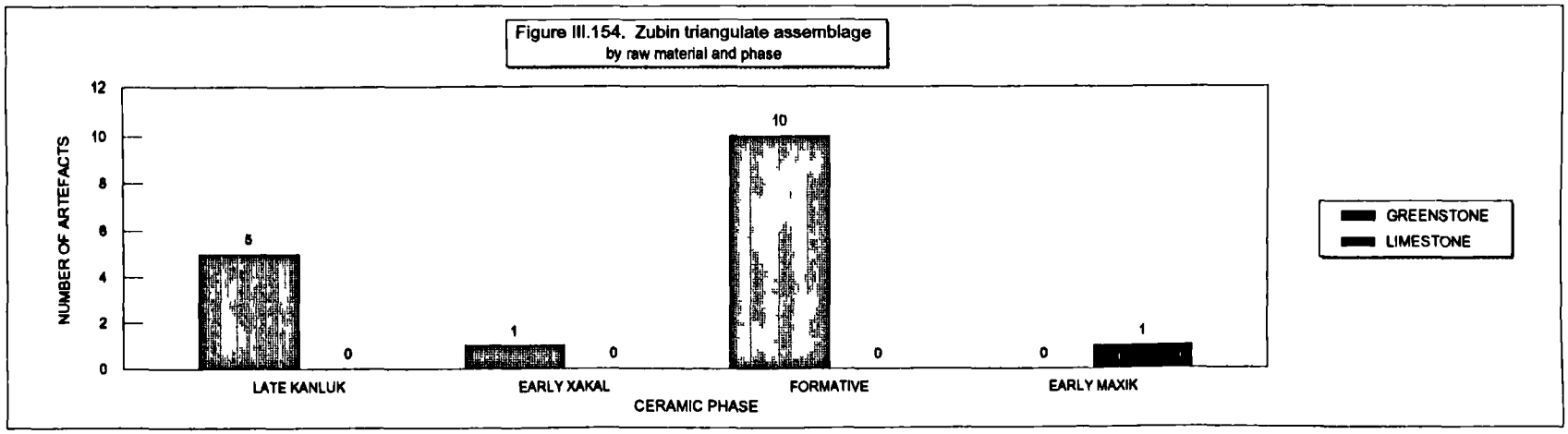
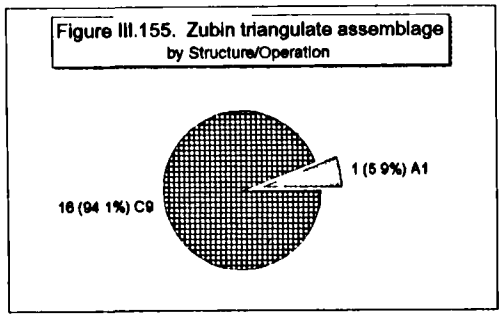


Table III.62. Zubin triangulate assemblage by raw material and Structure/Operation.

	A1	C9	TOTAL	PERCENTAGE
GREENSTONE	0	16	16	94.12
LIMESTONE	1	0	1	5.88
TOTAL	1	16	17	
PERCENTAGE	5 88	94.12		100%



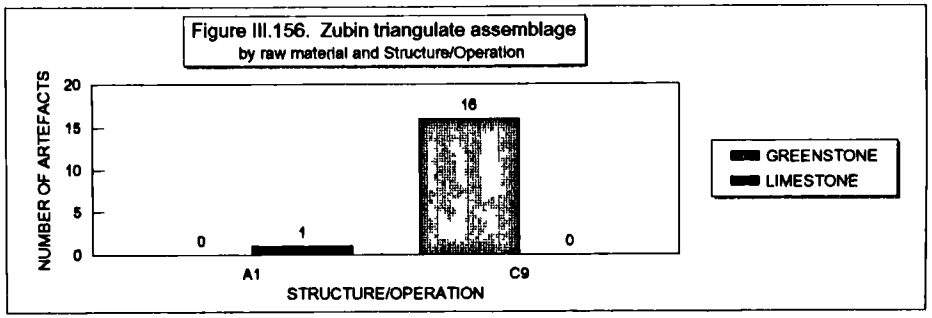
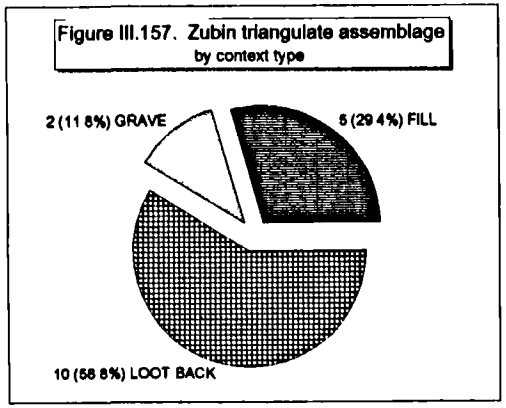
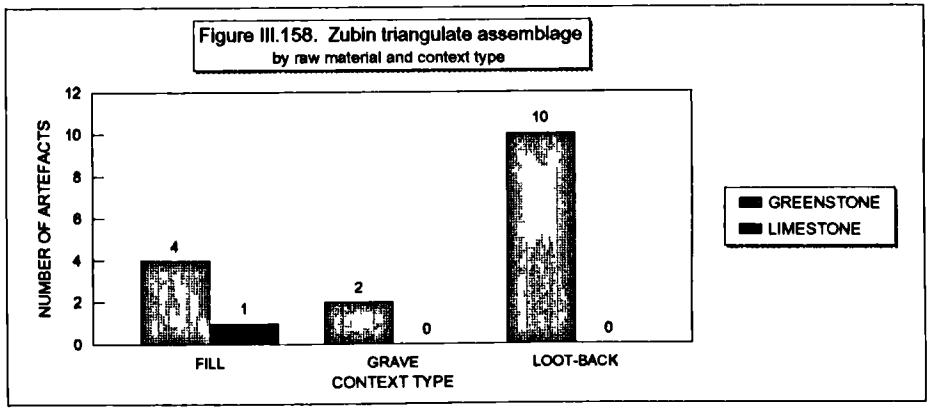


Table III.63. Zubin triangulate assemblage by raw material and context type.

	FILL	GRAVE	LOOT-BACK	TOTAL	PERCENTAGE
GREENSTONE	4	2	10	16	94.12
LIMESTONE	1	0	0	1	5.88
TOTAL	5	2	10	17	
PERCENTAGE	29.41	11 76	58.82		100%

NOTE LOOT-BACK = LOOTER'S BACKDIRT





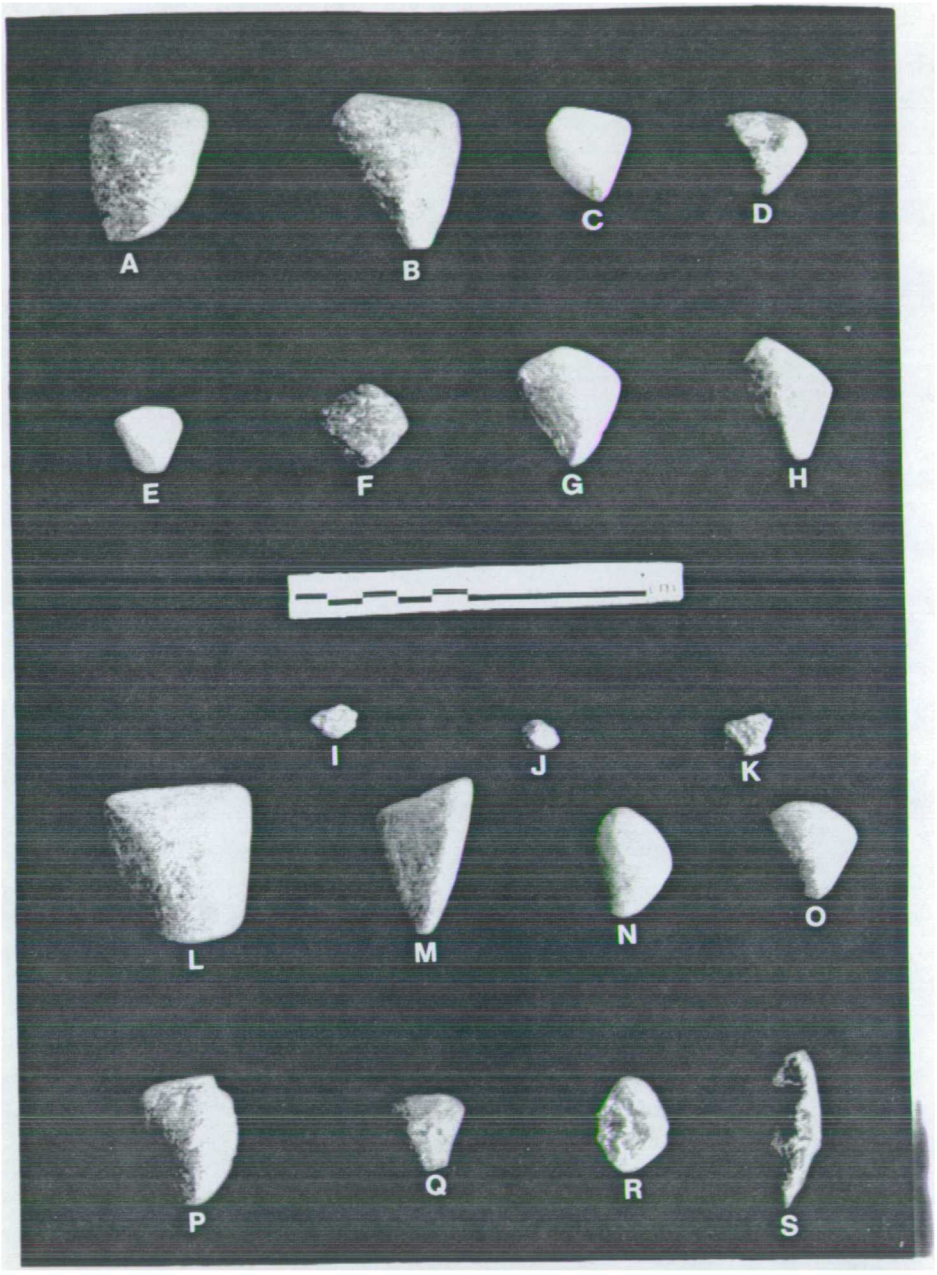
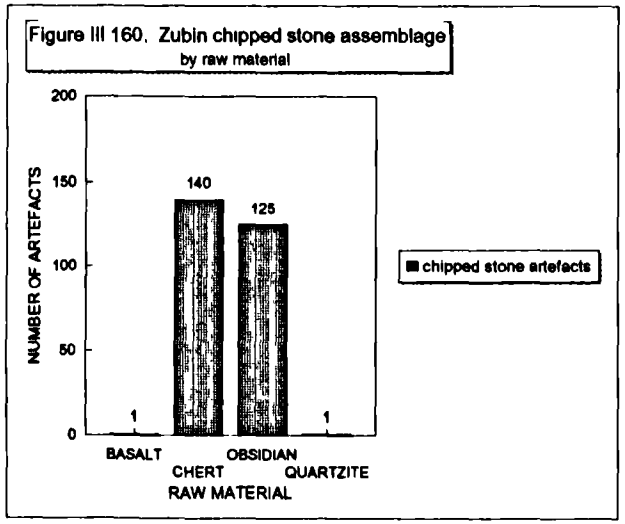
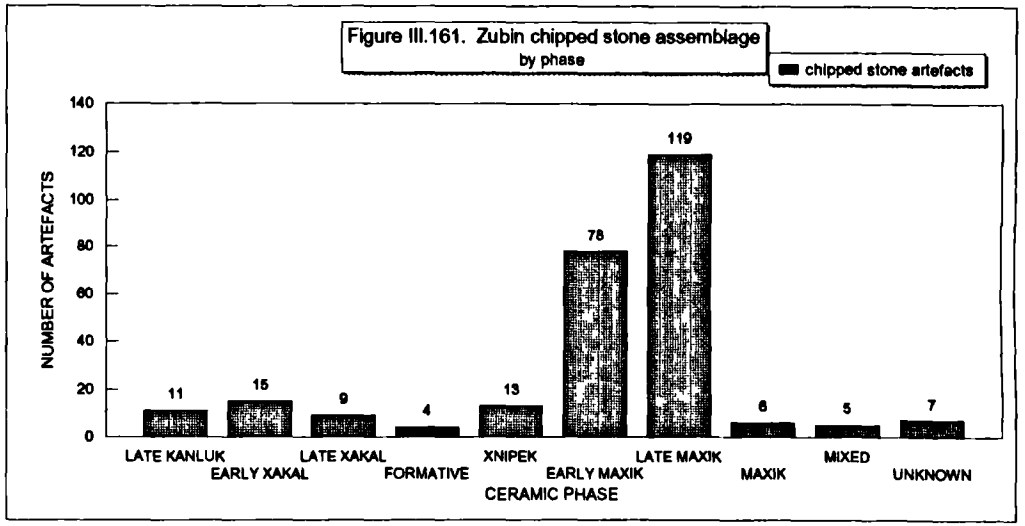


Figure III 159 Greenstone triangulates (a-h, l-s) and modified greenstone pebbles (i-k) from Structure C9, Zubin (a) C9-SF 40 (b) C9-SF 41, (c) C9-SF 27, (d) C9-SF 29, (e) C9-SF 48, (f) C9-SF/28, g) C9-SF 37, (h) C9-SF 32, (i) C9-SF 33, (j) C9-SF 49, (k) C9-SF 50, ( ) C9-SF 34, (m) C9-SF 39, (n) C9-SF/26, (o) C9-SF 36, (p) C9-SF 38, q) C9-SF 35, (r) C9-SF 31, (s) C9-SF 30

Table III.64. Zubin chipped stone assemblage by raw material and phase.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	XNIPEK	EARLY MAXIK	LATE MAXIK	MAXIK	MIXED	UNKNOWN	TOTAL	PERCENTAGE
BASALT	0	0	0	0	0	0	1	0	0	0	1	0 37
CHERT	5	7	8	2	0	34	69	6	3	6	140	52 43
OBSIDIAN	6	8	1	2	13	43	49	0	2	1	125	46 82
QUARTZITE	0	0	0	0	0	1	0	0	0	0	1	0 37
TOTAL	11	15	9	4	13	78	119	6	5	7	267	
PERCENTAGE	4.12	5 62	3 37	1.50	4.87	29.21	44.57	2.25	1.87	2 62		100%





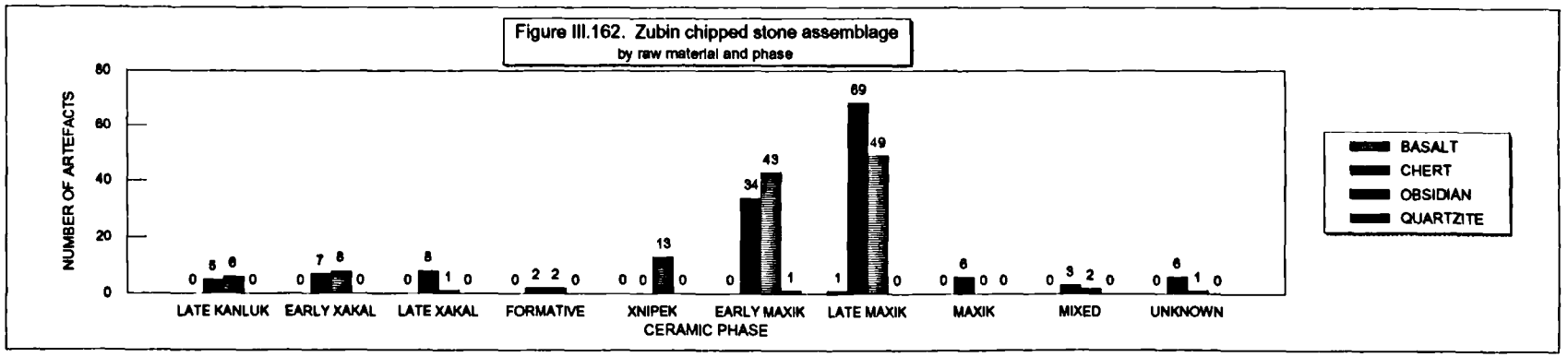
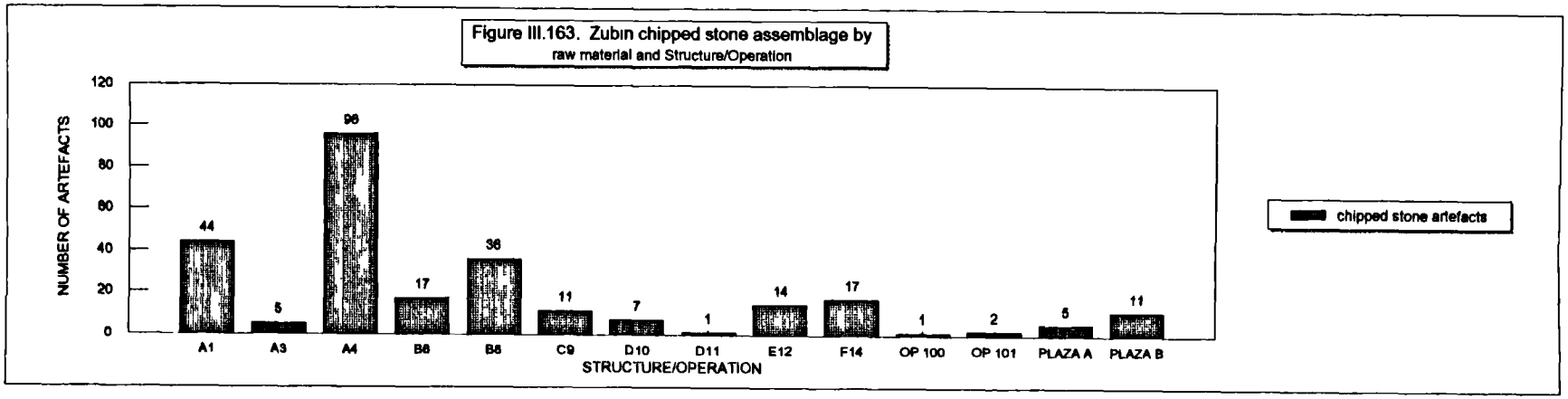


Table III.65. Zubin chipped stone assemblage by raw material and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	D11	E12	F14	OP.100	OP.101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
BASALT	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0.37
CHERT	16	4	44	11	13	7	5	1	11	15	0	1	2	10	140	52 43
OBSIDIAN	27	1	51	6	23	4	2	0	3	2	1	1	3	1	125	46 82
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.37
TOTAL	44	5	96	17	36	11	7	1	14	17	1	2	5	11	267	
PERCENTAGE	16.48	1 87	35.96	6.37	13.48	4.12	2.62	0.37	5.24	6.37	0.37	0.75	1.87	4.12		100%



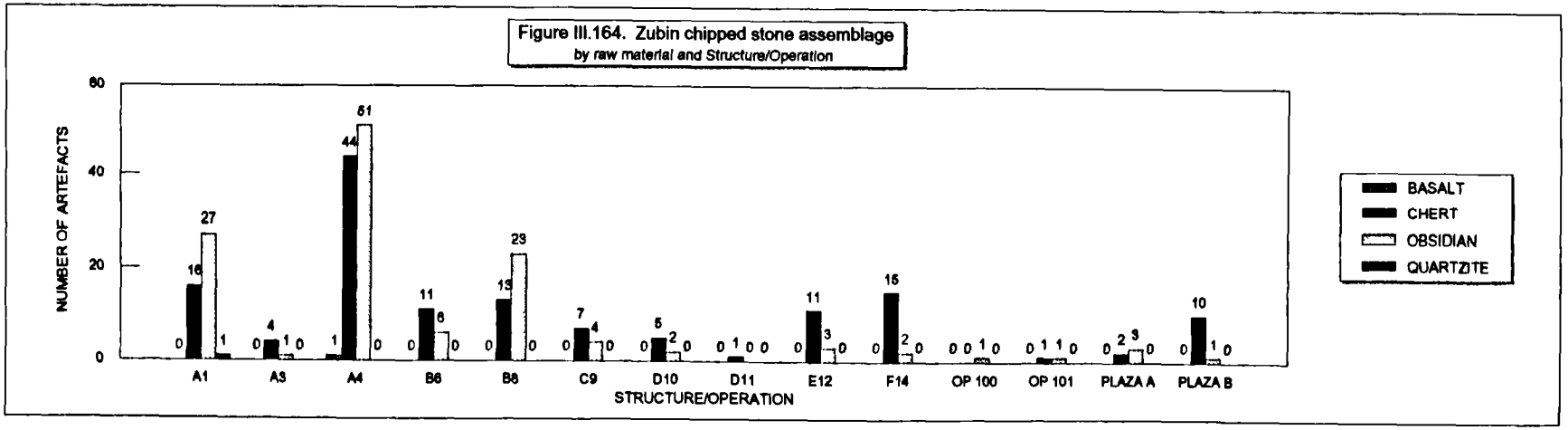
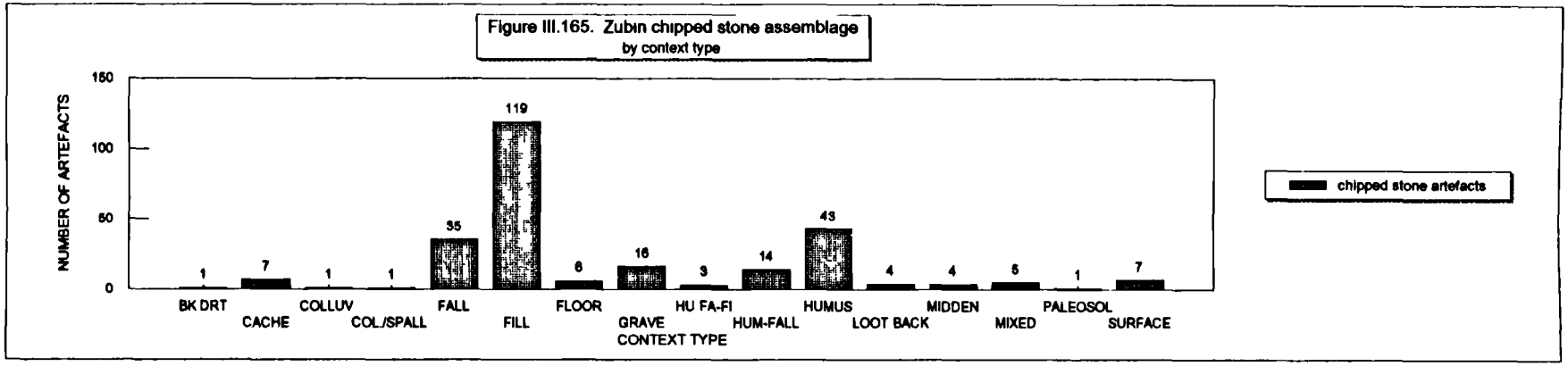


Table III.66. Zubin chipped stone assemblage by raw material and context type.

	BK DRT	CACHE	COLLUV	COL /SPALL	FALL	FILL	FLOOR	GRAVE	HU-FA-FI	HUM-FALL	HUMUS	LOOT-BACK	MIDDEN	MIXED	PALEOSOL	SURFACE	TOTAL	PERCENTAGE
BASALT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0 37
CHERT	1	3	0	1	16	71	2	1	0	2	31	2	0	5	0	5	140	52 43
OBSIDIAN	0	4	1	0	19	48	4	14	3	12	11	2	4	0	1	2	125	46 82
QUARTZITE	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0 37
TOTAL	1	7	1	1	35	119	6	16	3	14	43	4	4	5	1	7	267	
PERCENTAGE	0 37	2 62	0 37	0 37	13 11	44 57	2 25	5 99	1 12	5 24	16 10	1 50	1 50	1 87	0 37	2 62		100%

NOTE BK DRT BACKDIRT COLLUV = COLLUVIUM COL /SPALL = COLLUVIUM/SPALL HU-FA-FI = HUMUS/FALL/FILL HUM-FALL = HUMUS/FALL LOOT-BACK = LOOTER'S BACKDIRT



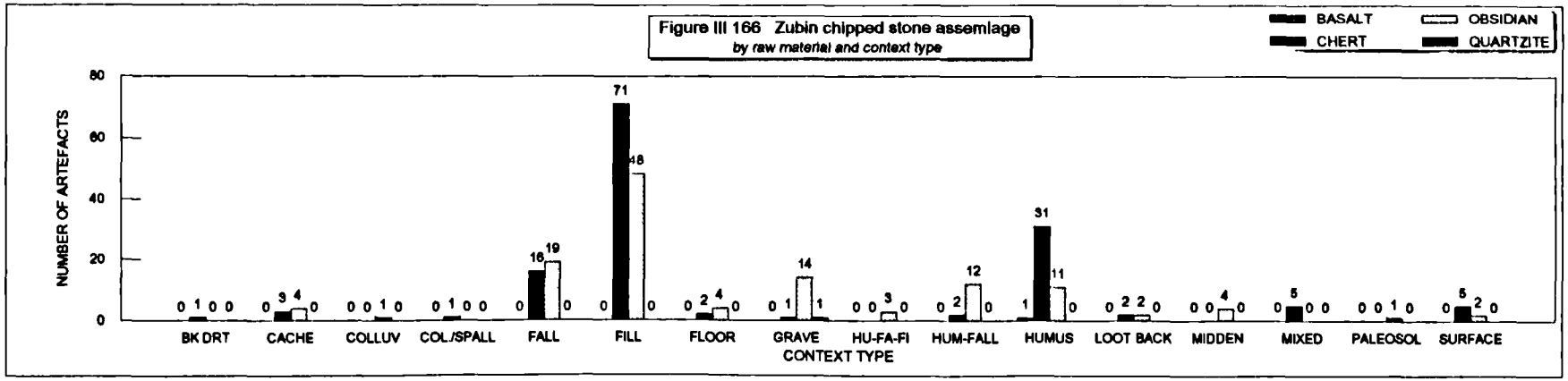
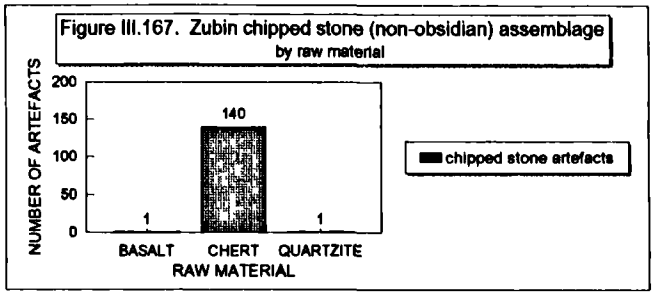
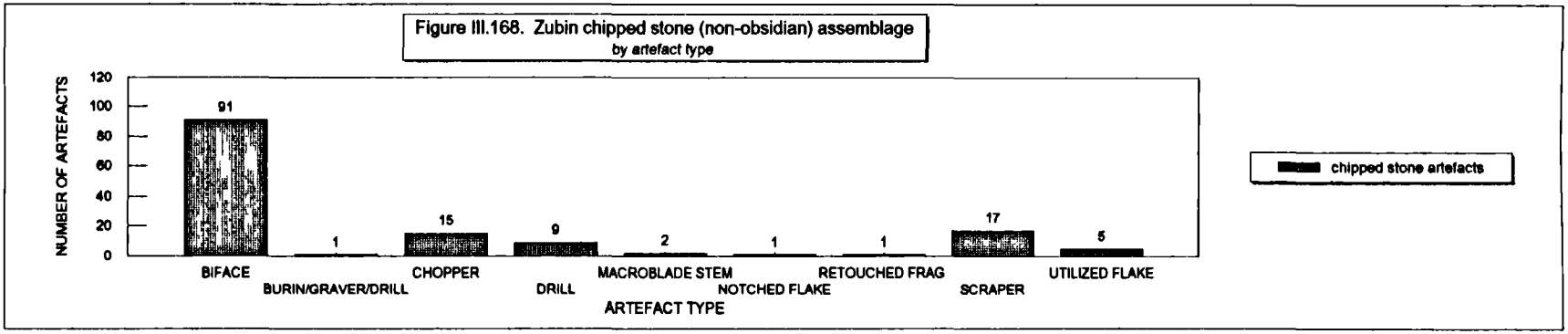


Table III.67. Zubin chipped stone (non-obsidian) assemblage by raw material and artefact type.

	BASALT	CHERT	QUARTZITE	TOTAL	PERCENTAGE
BIFACE	0	91	0	91	64.08
BURIN/GRAVER/DRILL	0	1	0	1	0.70
CHOPPER	0	14	1	15	10.56
DRILL	0	9	0	9	6.34
MACROBLADE STEM	0	2	0	2	1.41
NOTCHED FLAKE	0	1	0	1	0.70
RETOUCHED FRAG.	0	1	0	1	0.70
SCRAPER	1	16	0	17	11.97
UTILIZED FLAKE	0	5	0	5	3.52
TOTAL	1	140	1	142	
PERCENTAGE	0.70	98.59	0.70		100%





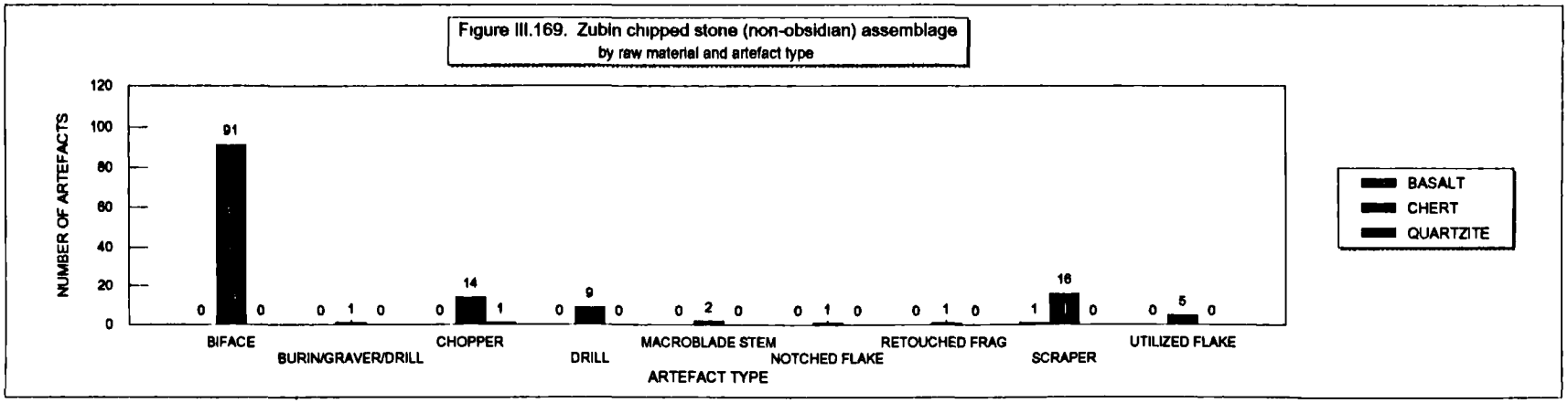


Table III.68. Zubin chipped stone (non-obsidian) assemblage by artefact type and phase.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	EARLY MAXIK	LATE MAXIK	MAXIK	MIXED	UNKNOWN	TOTAL	PERCENTAGE
BIFACE	2	6	5	2	24	42	4	0	6	91	64 08
BURIN/GRAVER/DRILL	0	0	0	0	0	1	0	0	0	1	0 70
CHOPPER	0	1	0	0	2	11	0	1	0	15	10 56
DRILL	1	1	2	0	0	4	1	0	0	9	6 34
MACROBLADE STEM	1	0	0	0	0	0	0	1	0	2	1 41
NOTCHED FLAKE	0	0	0	0	0	1	0	0	0	1	0.70
RETOUCHED FRAG	0	0	0	0	0	1	0	0	0	1	0.70
SCRAPER	1	0	0	0	6	8	1	1	0	17	11 97
UTILIZED FLAKE	0	0	0	0	3	2	0	0	0	5	3 52
TOTAL	5	8	7	2	35	70	6	3	6	142	
PERCENTAGE	3 52	5.63	4.93	1.41	24.65	49.30	4.23	2 11	4 23		100%

Figure III.170. Zubin chipped stone (non-obsidian) assemblage by phase

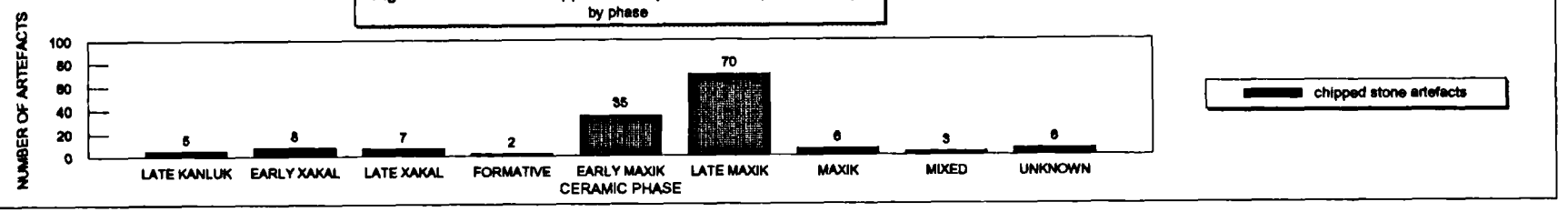


Figure III.171. Zubin chipped stone (non-obsidian) assemblage by artefact type and phase

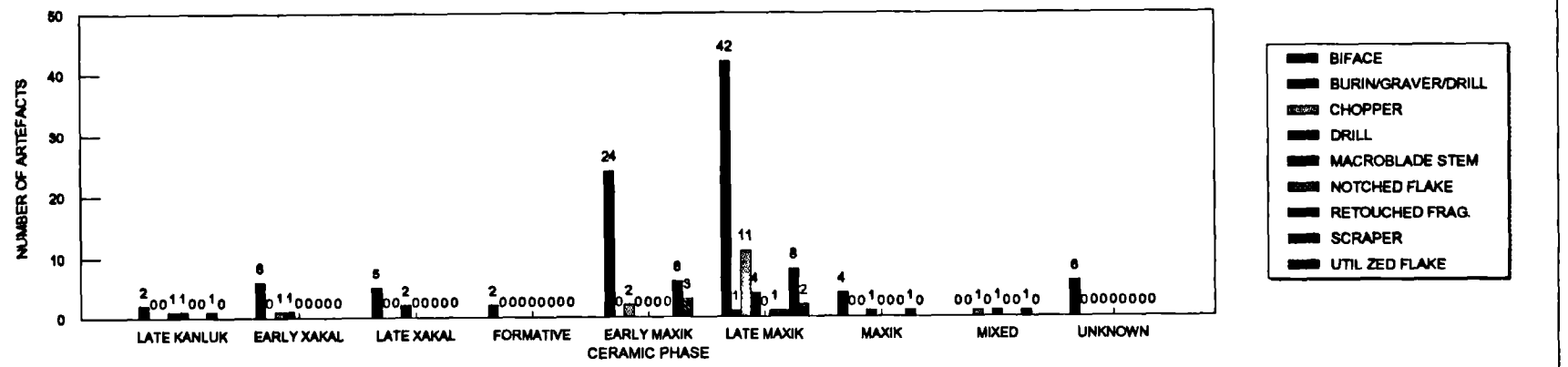
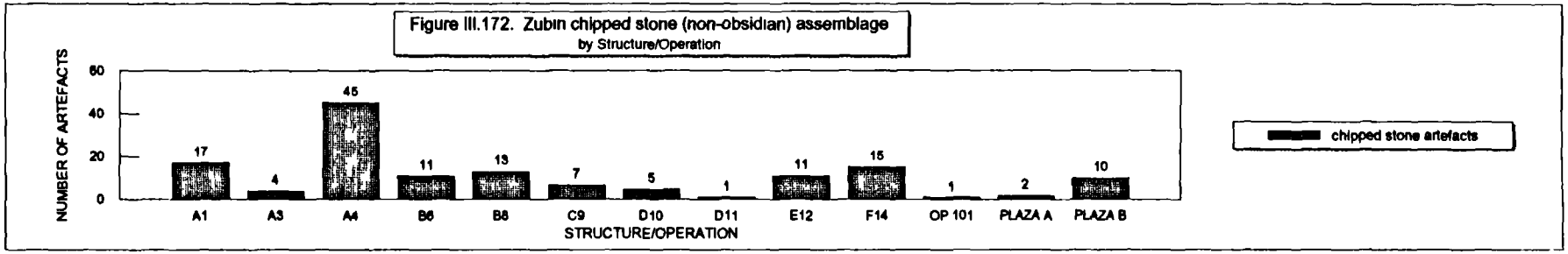


Table III 69. Zubin chipped stone (non-obsidian) assemblage by artefact type and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	D11	E12	F14	OP 101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
BIFACE	13	3	23	8	10	4	1	1	7	10	1	2	8	91	64 08
BURIN/GRAVER/DRILL	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0 70
CHOPPER	1	0	4	1	2	1	2	0	2	1	0	0	1	15	10 56
DRILL	1	1	6	0	1	0	0	0	0	0	0	0	0	9	6 34
MACROBLADE STEM	1	0	0	0	0	1	0	0	0	0	0	0	0	2	1 41
NOTCHED FLAKE	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0 70
RETOUCHED FRAG	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0 70
SCRAPER	1	0	8	2	0	1	0	0	2	3	0	0	0	17	11 97
UTILIZED FLAKE	0	0	4	0	0	0	1	0	0	0	0	0	0	5	3 52
TOTAL	17	4	45	11	13	7	5	1	11	15	1	2	10	142	
PERCENTAGE	11 97	2 82	31 69	7 75	9 15	4 93	3 52	0 70	7 75	10 56	0 70	1 41	7 04		100%



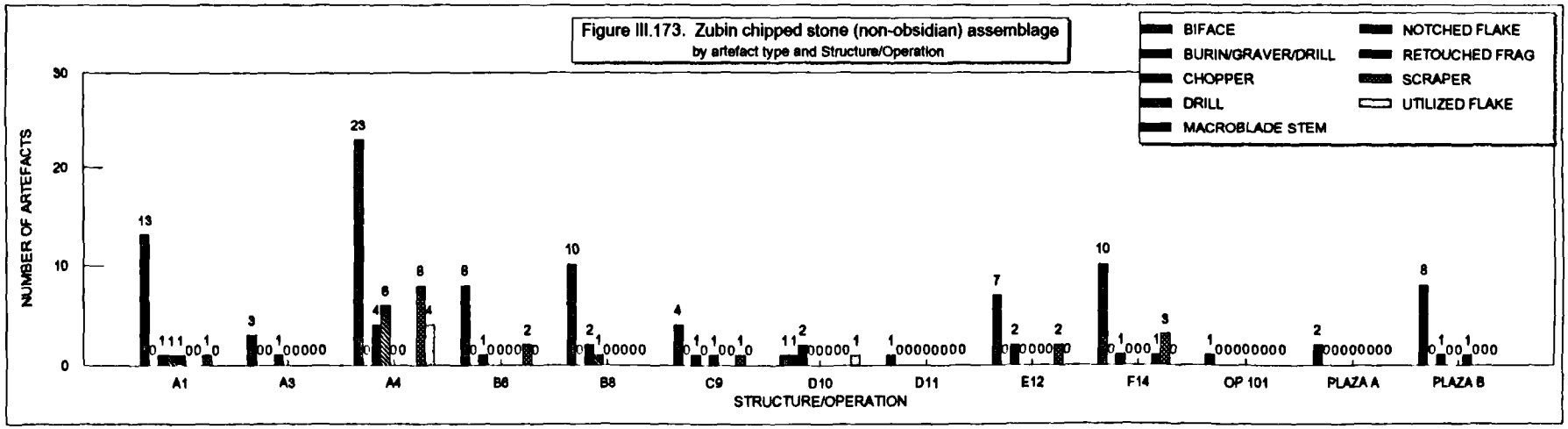
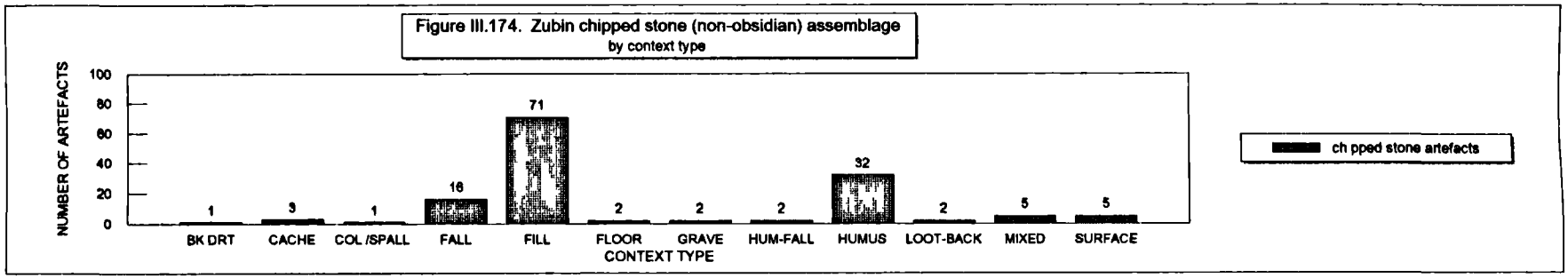
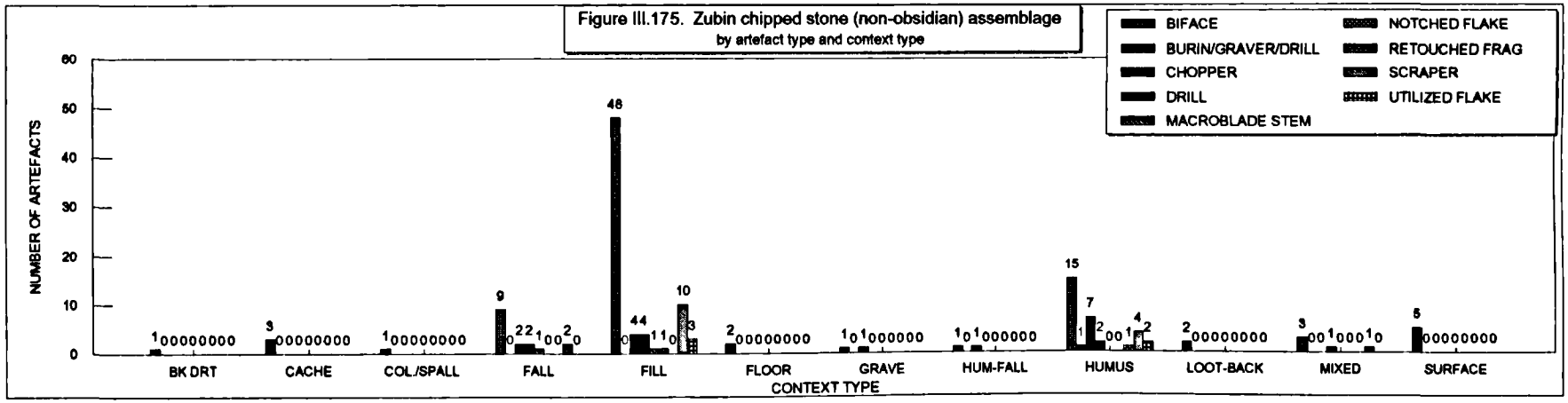


Table III.70. Zubin chipped stone (non-obsidian) assemblage by artefact type and context type.

	BK.DRT	CACHE	COL./SPALL.	FALL	FILL	FLOOR	GRAVE	HUM-FALL	HUMUS	LOOT-BACK	MIXED	SURFACE	TOTAL	PERCENTAGE
BIFACE	1	3	1	9	48	2	1	1	15	2	3	5	91	64 08
BURIN/GRAVER/DRILL	0	0	0	0	0	0	0	0	1	0	0	0	1	0 70
CHOPPER	0	0	0	2	4	0	1	1	7	0	0	0	15	10 56
DRILL	0	0	0	2	4	0	0	0	2	0	1	0	9	6 34
MACROBLADE STEM	0	0	0	1	1	0	0	0	0	0	0	0	2	1 41
NOTCHED FLAKE	0	0	0	0	1	0	0	0	0	0	0	0	1	0 70
RETOUCHED FRAG.	0	0	0	0	0	0	0	0	1	0	0	0	1	0 70
SCRAPER	0	0	0	2	10	0	0	0	4	0	1	0	17	11 97
UTILIZED FLAKE	0	0	0	0	3	0	0	0	2	0	0	0	5	3.52
TOTAL	1	3	1	16	71	2	2	2	32	2	5	5	142	
PERCENTAGE	0 70	2 11	0.70	11.27	50.00	1.41	1.41	1.41	22.54	1.41	3 52	3.52		100%

NOTE BK DRT = BACKDIRT COL /SPALL = COLLUVIUM/SPALL HUM-FALL = HUMUS/FALL LOOT-BACK = LOOTER'S BACKDIRT





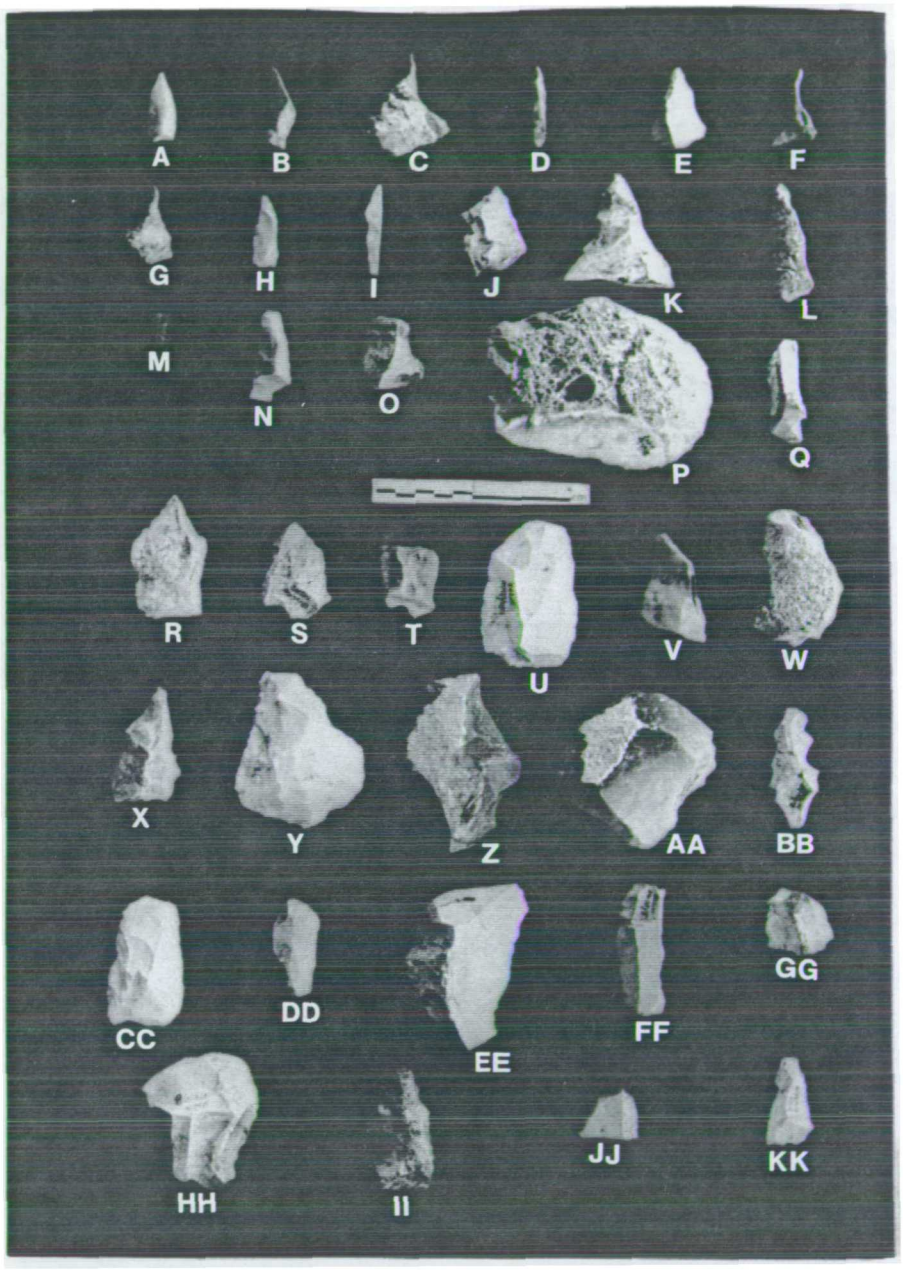
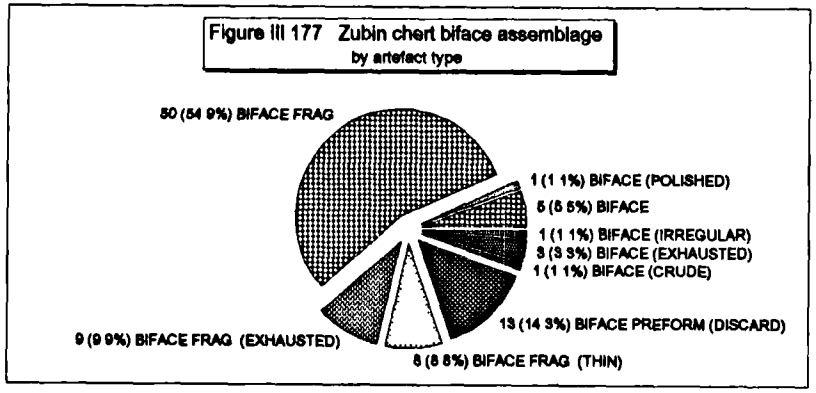
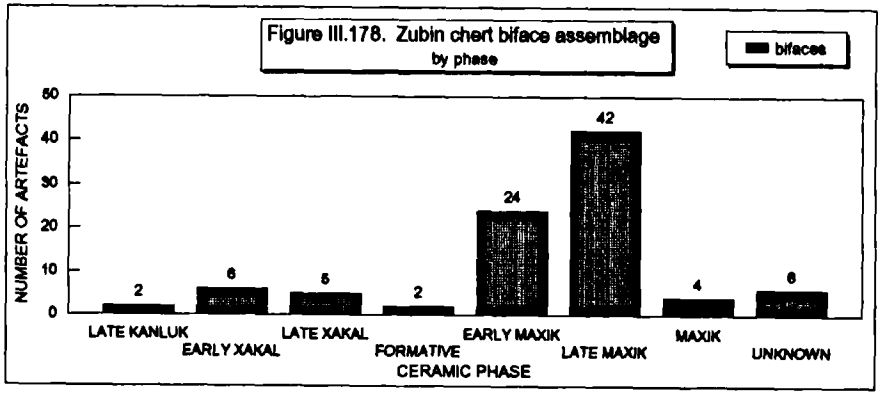


Figure III 176. Awls gravers (a-l), unifacial choppers (p), chopper celt fragments (hh), and scraping/cutting tools (m-o, q-gg ii-kk) from Zubın (a) A1-SF 300, (b) A1-SF 271, (c) A4-SF/134, (d) A4-SF 140, (e) A4-SF 144, (f) A4-SF 122, (g) A3-SF 6; (h) B8-SF/54, (i) D10-SF 6, (j) E12-SF 27, (k) E12-SF 20, (l) F14-SF 16, (m) A4-SF 89, (n) A1-SF 270, (o) A4-SF 94, (p) A4-SF 86, (q) A4-SF 76, (r) A4-SF 111, (s) A4-SF 132, (t) A4-SF 103, (u) A4-SF 108, (v) A4-SF 128, (w) A4-SF 123; (x) A4-SF 82, (y) A4-SF 147, (z) A4-SF 107, (aa) A4-SF 129, (bb) A2-SF 8, (cc) B6-SF 16, (dd) B6-SF 12, (ee) C9-SF 55, (ff) D10-SF 5, (gg) F14-SF 19, (hh) F14-SF 8, (ii) F14-SF 10, (jj) F14-SF 12, (kk) F14-SF 9

Table III.71. Zubin chert biface assemblage by artefact type and phase

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	EARLY MAXIK	LATE MAXIK	MAXIK	UNKNOWN	TOTAL	PERCENTAGE
BIFACE	0	0	0	0	1	4	0	0	5	5 49
BIFACE (POLISHED)	1	0	0	0	0	0	0	0	1	1 10
BIFACE FRAG.	1	1	4	0	14	24	1	5	50	54 95
BIFACE FRAG (EXHAUSTED)	0	4	1	0	1	3	0	0	9	9 89
BIFACE FRAG (THIN)	0	0	0	0	3	4	1	0	8	8 79
BIFACE PREFORM (DISCARD)	0	1	0	1	5	3	2	1	13	14 29
BIFACE (CRUDE)	0	0	0	0	0	1	0	0	1	1 10
BIFACE (EXHAUSTED)	0	0	0	0	0	3	0	0	3	3 30
BIFACE (IRREGULAR)	0	0	0	1	0	0	0	0	1	1 10
TOTAL	2	6	5	2	24	42	4	6	91	
PERCENTAGE	2.20	6 59	5.49	2.20	26.37	46 15	4 40	6.59		100%





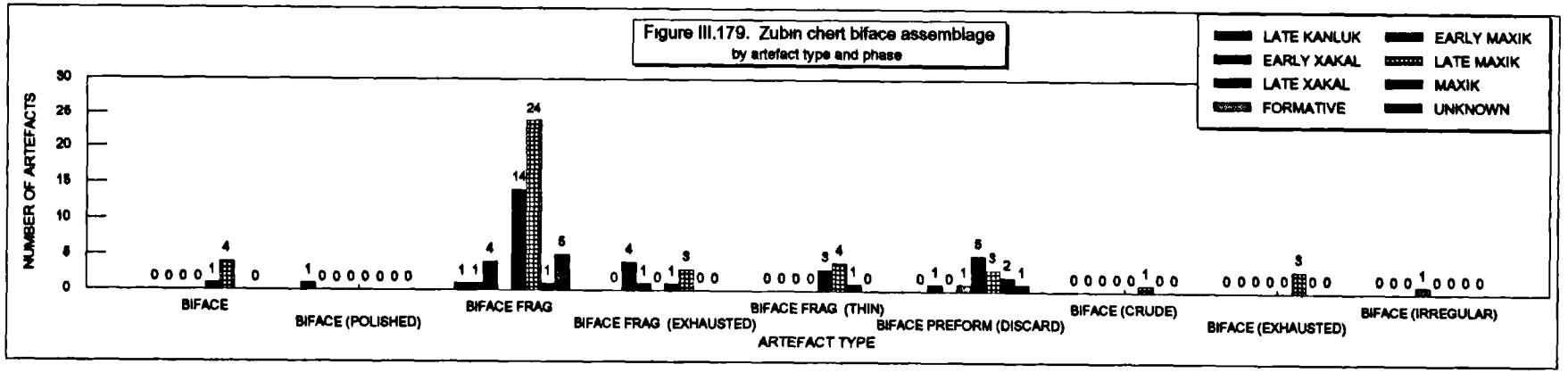
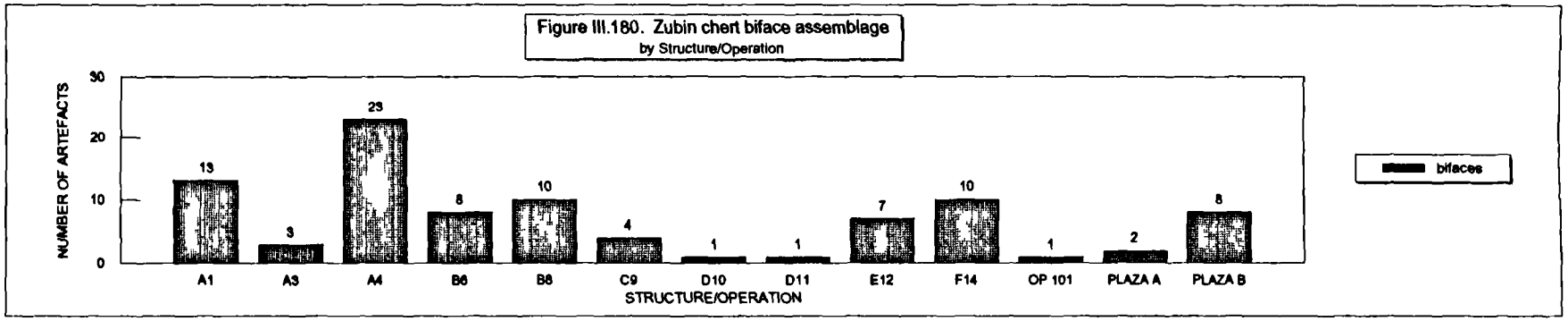


Table III.72. Zubin chert biface assemblage by artefact type and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	D11	E12	F14	OP.101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
BIFACE	0	0	1	0	0	0	0	0	0	0	1	0	3	5	5 49
BIFACE FRAG.	6	3	14	6	6	0	1	1	3	7	0	1	2	50	54.95
BIFACE FRAG (EXHAUSTED)	1	0	4	0	2	0	0	0	0	1	0	1	0	9	9 89
BIFACE FRAG (THIN)	3	0	2	2	0	0	0	0	0	0	0	0	1	8	8 79
BIFACE PREFORM (DISCARD)	2	0	2	0	1	3	0	0	4	0	0	0	1	13	14 29
BIFACE (CRUDE)	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1 10
BIFACE (EXHAUSTED)	0	0	0	0	1	0	0	0	0	1	0	0	1	3	3.30
BIFACE (IRREGULAR)	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1.10
BIFACE (POLISHED)	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1.10
TOTAL	13	3	23	8	10	4	1	1	7	10	1	2	8	91	
PERCENTAGE	14 29	3 30	25.27	8 79	10.99	4.40	1.10	1.10	7.69	10.99	1.10	2 20	8.79		100%



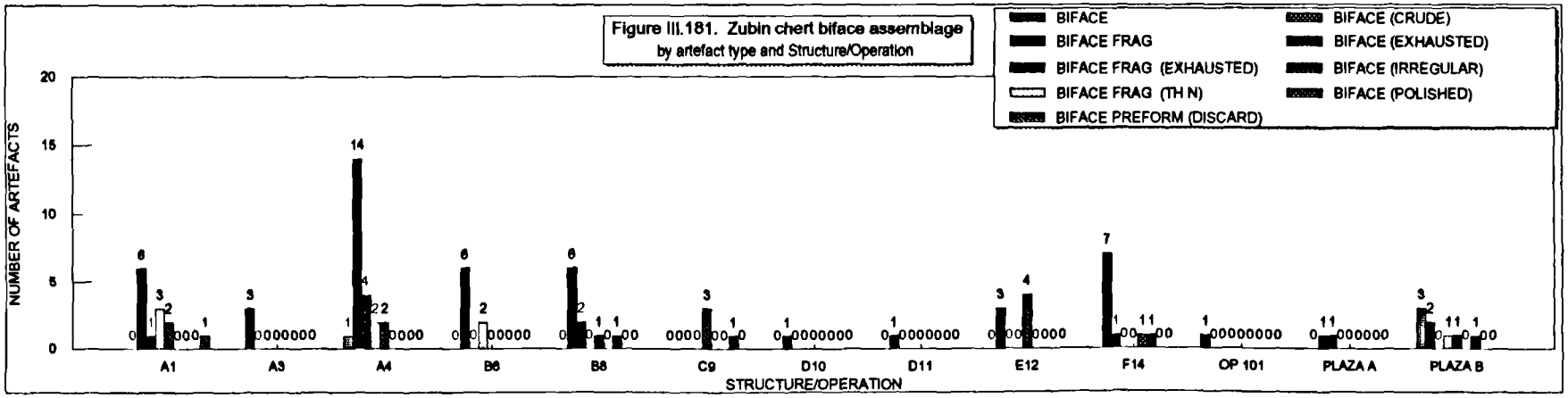
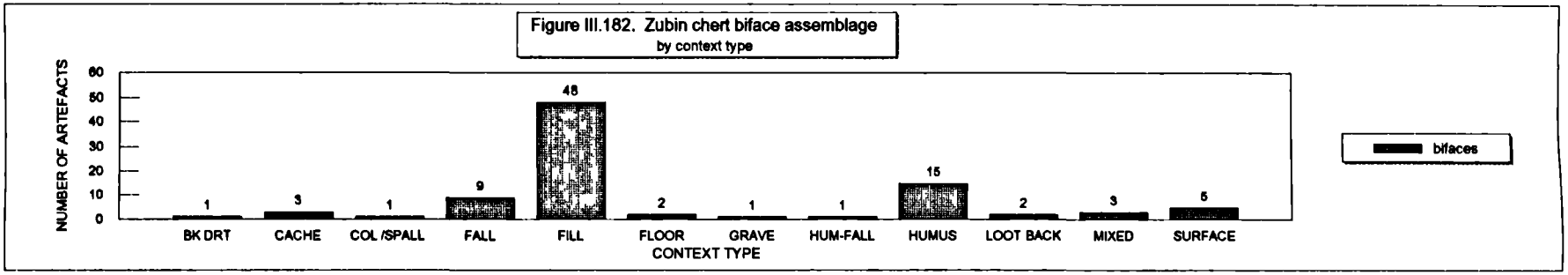
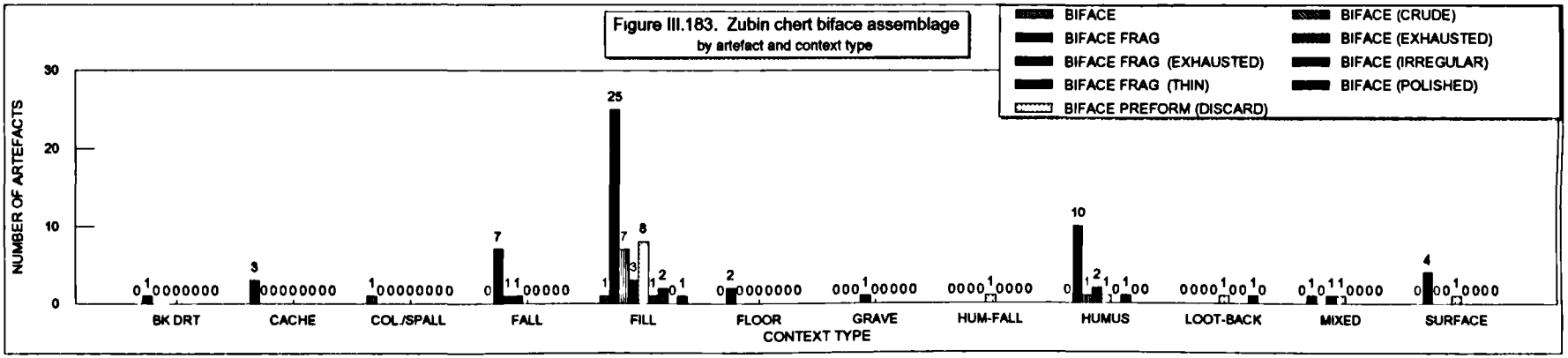


Table III.73. Zubin chert biface assemblage by artefact type and context type.

	BK DRT	CACHE	COL /SPALL	FALL	FILL	FLOOR	GRAVE	HUM-FALL	HUMUS	LOOT-BACK	MIXED	SURFACE	TOTAL	PERCENTAGE
BIFACE	0	3	1	0	1	0	0	0	0	0	0	0	5	5 49
BIFACE FRAG	1	0	0	7	25	2	0	0	10	0	1	4	50	54 95
BIFACE FRAG (EXHAUSTED)	0	0	0	1	7	0	0	0	1	0	0	0	9	9 89
BIFACE FRAG (THIN)	0	0	0	1	3	0	1	0	2	0	1	0	8	8 79
BIFACE PREFORM (DISCARD)	0	0	0	0	8	0	0	1	1	1	1	1	13	14 29
BIFACE (CRUDE)	0	0	0	0	1	0	0	0	0	0	0	0	1	1 10
BIFACE (EXHAUSTED)	0	0	0	0	2	0	0	0	1	0	0	0	3	3 30
BIFACE (IRREGULAR)	0	0	0	0	0	0	0	0	0	1	0	0	1	1 10
BIFACE (POLISHED)	0	0	0	0	1	0	0	0	0	0	0	0	1	1 10
TOTAL	1	3	1	9	48	2	1	1	15	2	3	5	91	
PERCENTAGE	1 10	3 30	1 10	9 89	52 75	2 20	1 10	1 10	16 48	2 20	3 30	5 49		100%

NOTE BK DRT = BACKDIRT COL /SPALL = COLLUVIUM/SPALL HUM-FALL = HUMUS/FALL, LOOT-BACK = LOOTER'S BACKDIRT





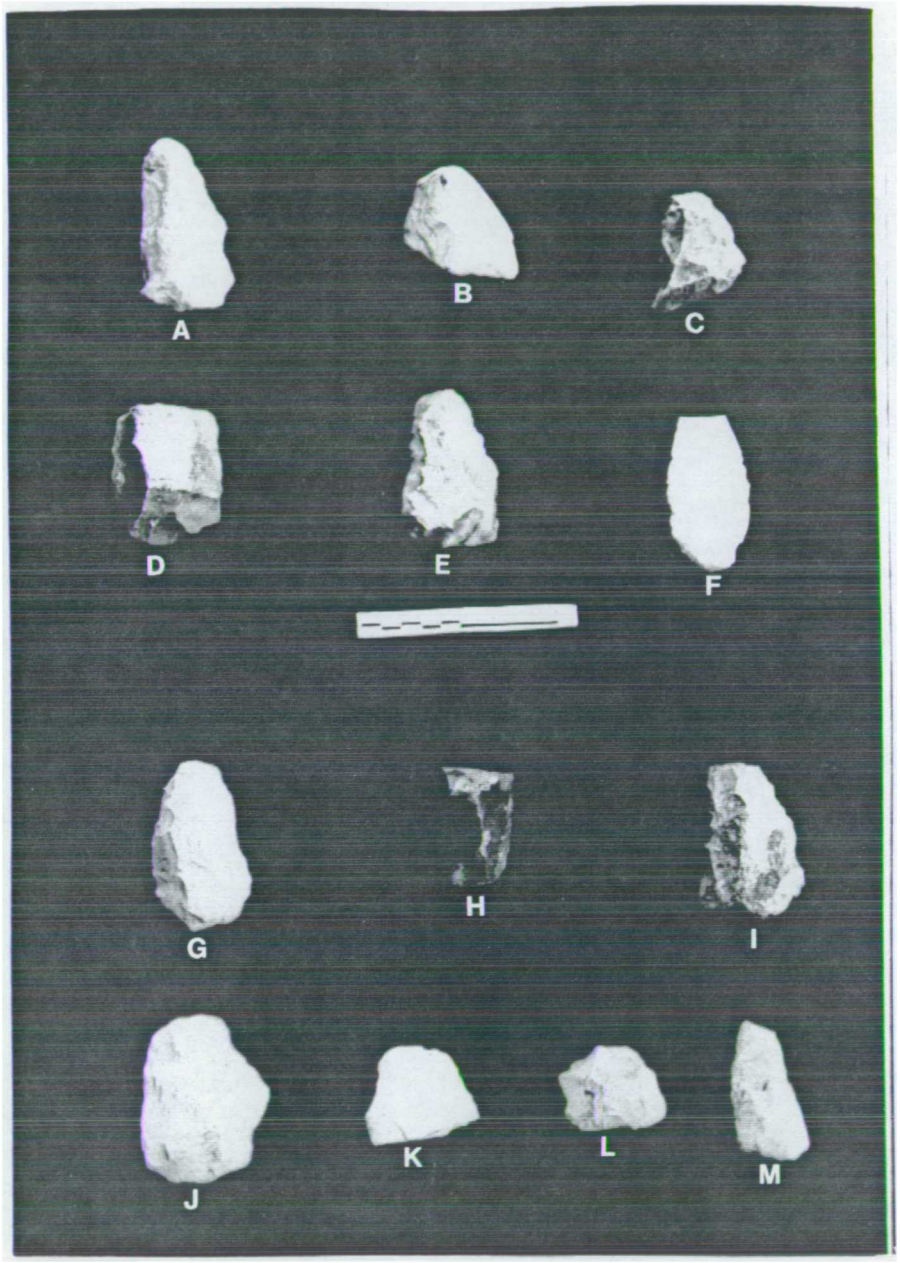


Figure III 184 Biface preform discards from Zub n (a) A1-SF 295, (b) A1-SF 291, (c) A2-SF 12, (d) B8-SF 47, (e) A4-SF 87, (f) A4-SF 92, (g) C9-SF/57, (h) C9-SF 54, (i) C9-SF 59, (j) E12-SF 21, (k E12-SF 24, (l) E12-SF 28, (m) E12-SF 26

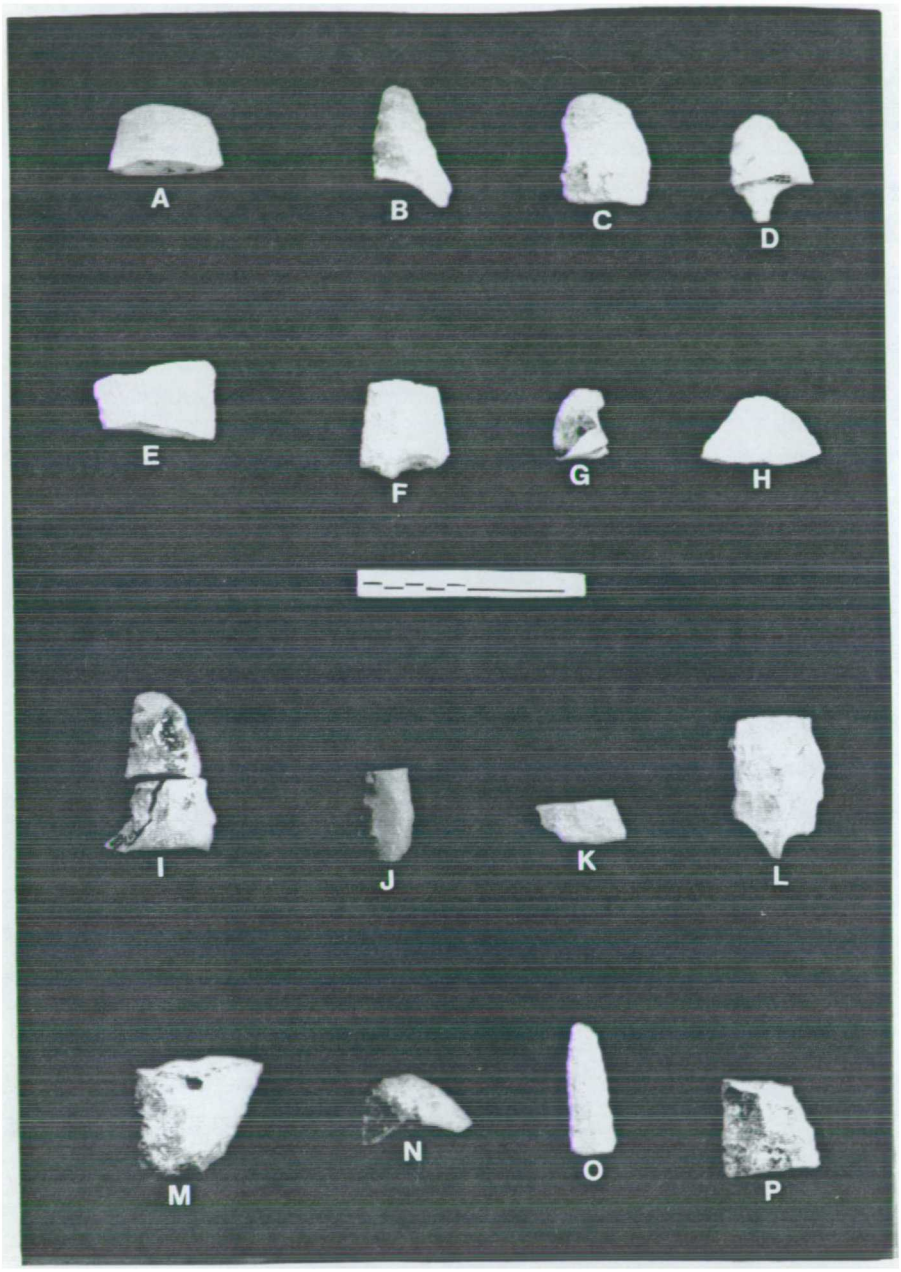


Figure III 185 Macroblade stems (b, o), and b face fragments (a, c-n, p) from Zubin (a) A1-SF 290, (b) A1-SF 276, (c) A3-SF 5, (d) A2-SF 9, (e) A4-SF 96, (f) A4-SF 113, (g) A4-SF 95, (h) AP-SF 7, (i) B8-SF 61, (j) B8-SF 51, (k) A4-SF 77, (l) A4-SF 118, (m) F14-SF 21, (n) F14-SF 15, (o) C9-SF 60, (p) B8-SF 46

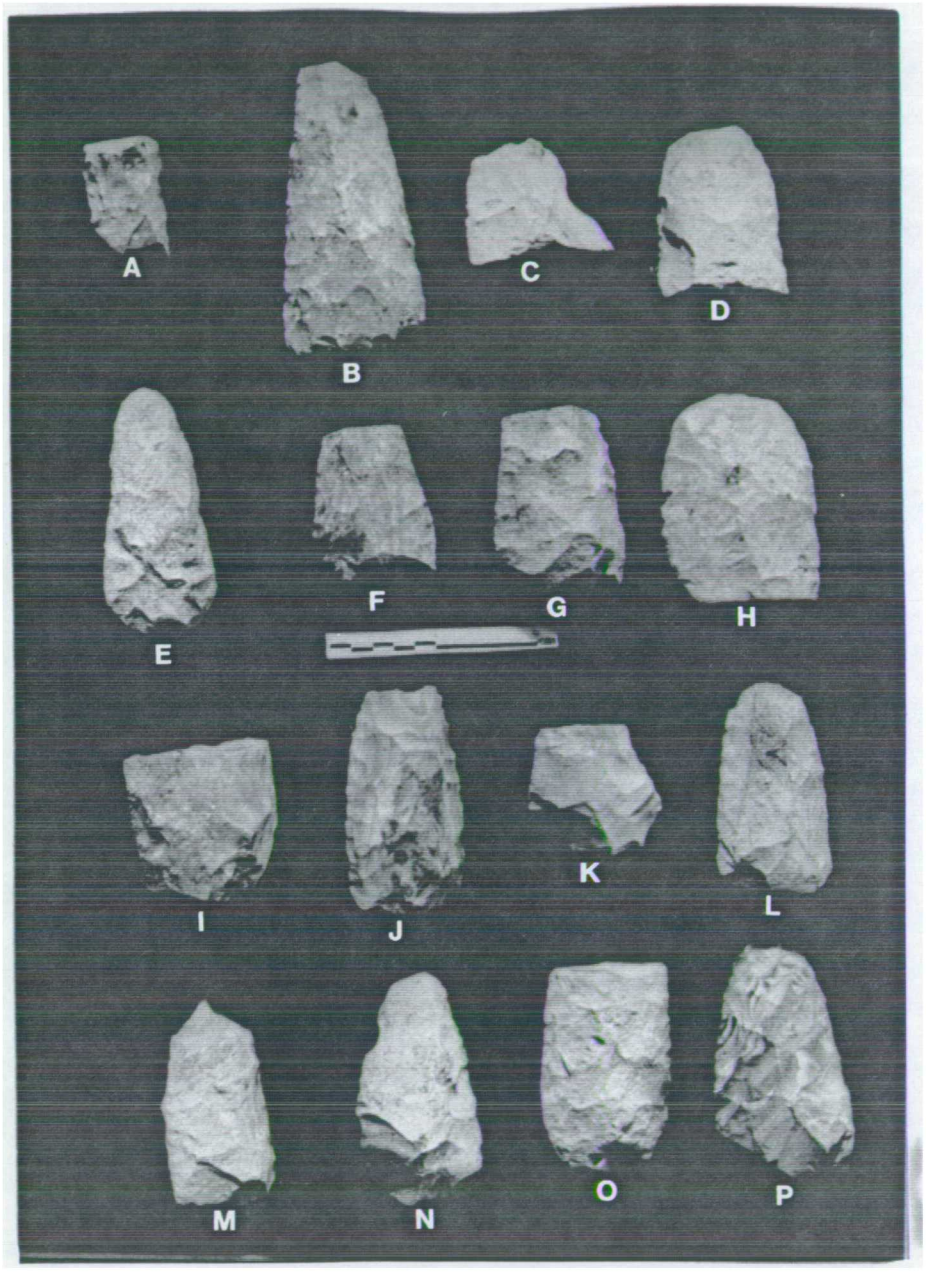


Figure III 186 Bifaces (e) and bifaces fragments (a-d, f-p) from Zubin (a) A1-SF 272, (b) A1-SF 273, (c) A3-SF 2, (d) A3-SF 3, (e) A4-SF 91, (f) A4-SF 137, (g) A4-SF 100, (h) A4-SF 79, (i) A4-SF 126, (j) A4-SF 131, (k) A4-SF 97, (l) B6-SF 9, (m) B6-SF 21, (n) B6-SF 17, o) B6-SF 8, (p) B6-SF 19.

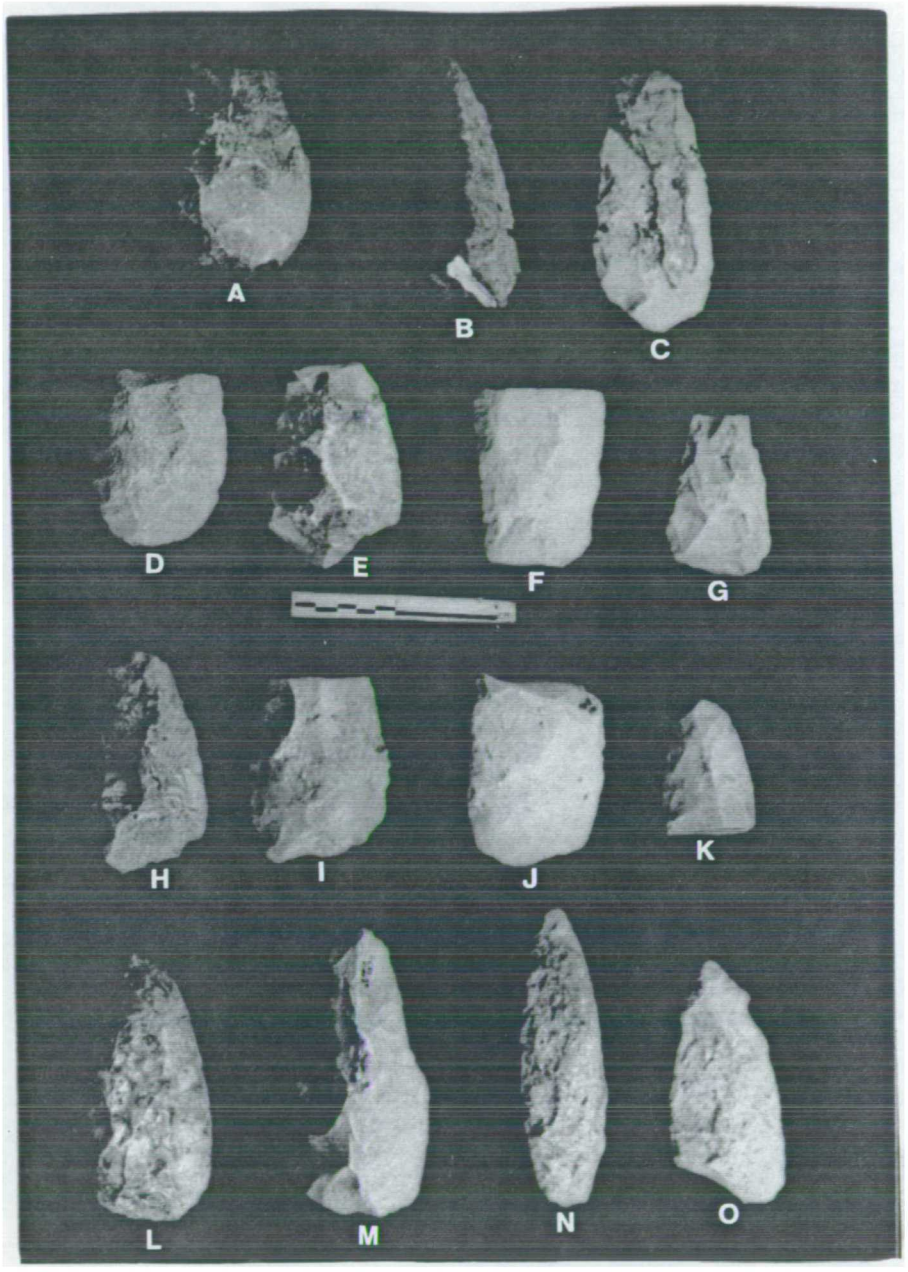


Figure III 187 Bifaces (c, l-n), crude bifaces (b), and biface fragments (a, d-k, o) from Zubin (a) F14-SF 18, (b) F14-SF 23, (c) 101-SF 3, (d) E12-SF 16, (e) E12-SF 17, (f) F14-SF 20, (g) F14-SF 7, (h) B8-SF 39, ı) B8-SF 50, (j) B8-SF 62, (k) D10-SF 4, (l) A2-SF 3, (m) A2-SF 5, (n) A2-SF 4, (o) A2-SF 6

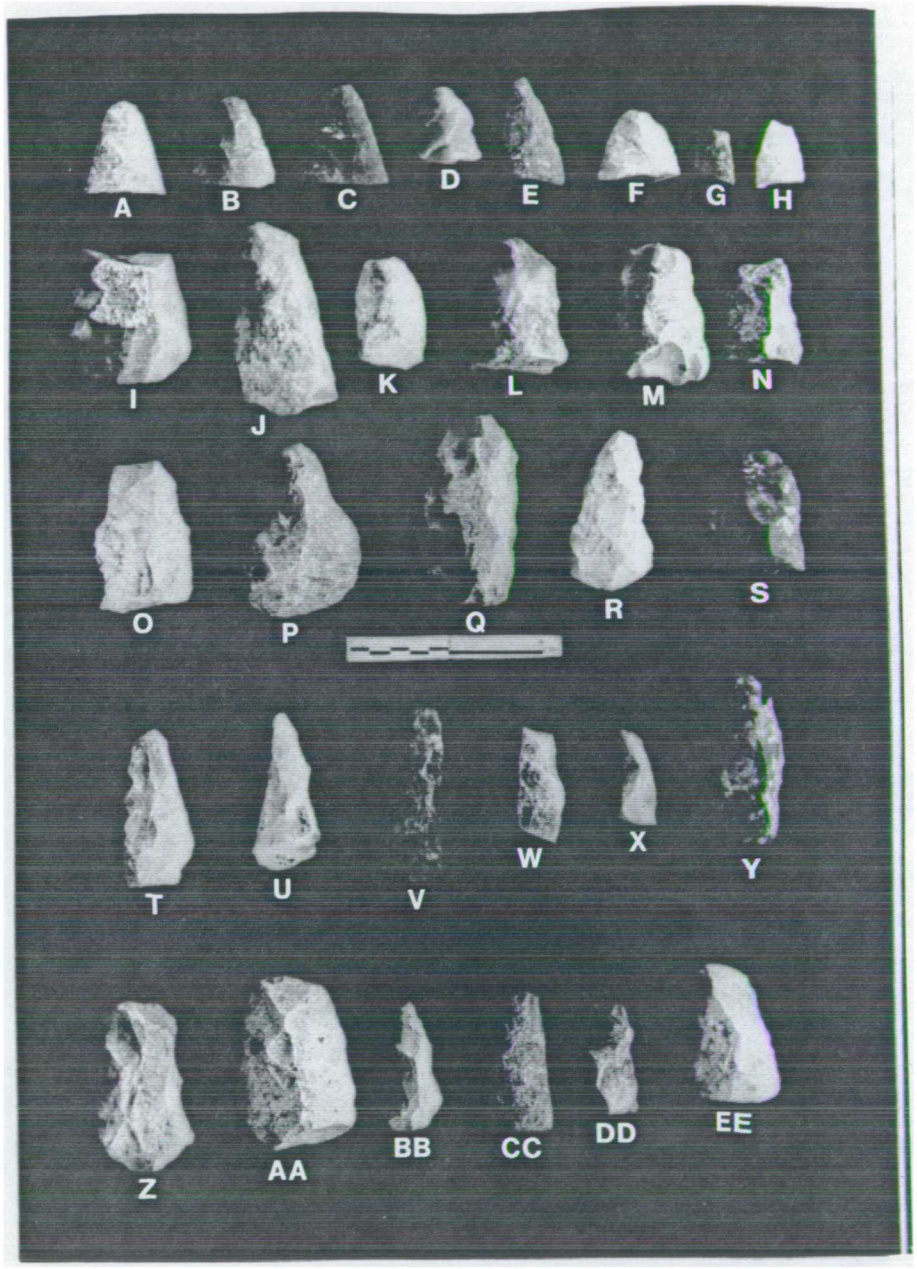
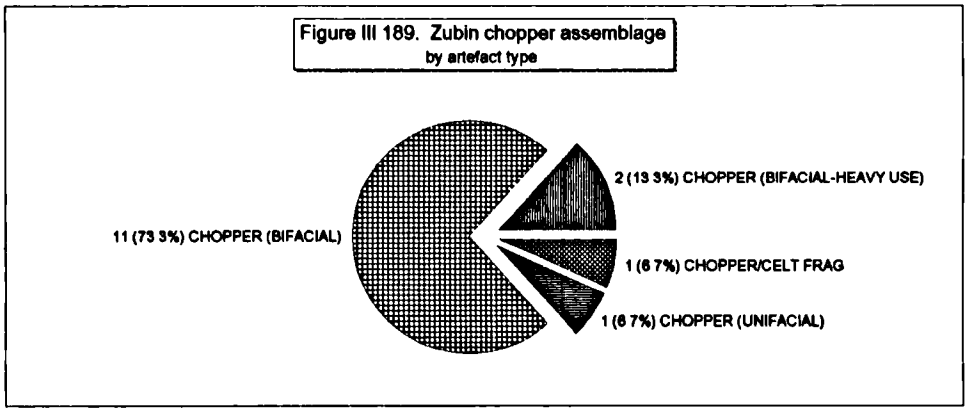
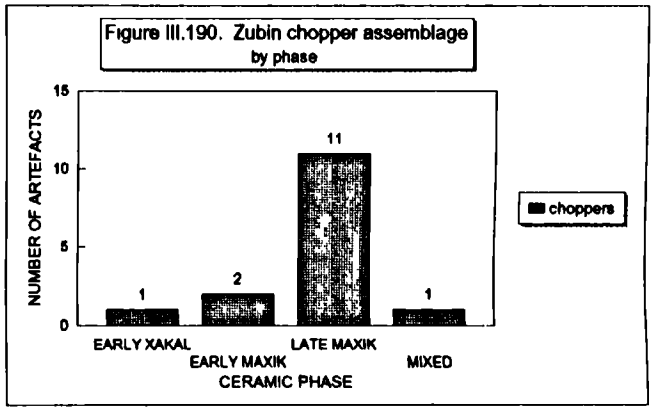


Figure III 188 Thin biface fragments (a-h), biface fragments (i-s), exhausted biface fragments (t-y, bb, dd, ee), and exhausted bifaces (z, aa, cc) from Zubin (a) A1-SF/280; (b) A1-SF/274, (c) A1-SF 275, (d) A4-SF 102, (e) A4-SF/138, (f) A2-SF 10, (g) B6-SF 20, (h) B6-SF/14, (i) A1-SF 298, (j) A1-SF 292, (k) A1-SF 287; (l) A4-SF 110, (m) A4-SF 114, (n) A4-SF 105, (o) B6-SF 15, (p) C9-SF 52, (q) D11-SF/1, (r) E12-SF 18, (s) F14-SF 22, (t) A1-SF 278, (u) AP-SF 6, (v) A4-SF/143, (w) A4-SF 93; (x) A4-SF 45, (y) A4-SF 101, (z) F14-SF 14, (aa) A2-SF 11, (bb) B8-SF 49, (cc) B8-SF 38, (dd) B8-SF 53, (ee) F14-SF/13

Table III.74. Zubin chopper assemblage by artefact type and phase.

	EARLY XAKAL	EARLY MAXIK	LATE MAXIK	MIXED	TOTAL	PERCENTAGE
CHOPPER (BIFACIAL HEAVY USE)	1	0	1	0	2	13 33
CHOPPER (BIFACIAL)	0	2	8	1	11	73 33
CHOPPER (UNIFACIAL)	0	0	1	0	1	6 67
CHOPPER/CELT FRAG.	0	0	1	0	1	6.67
TOTAL	1	2	11	1	15	
PERCENTAGE	6 67	13.33	73.33	6.67		100%





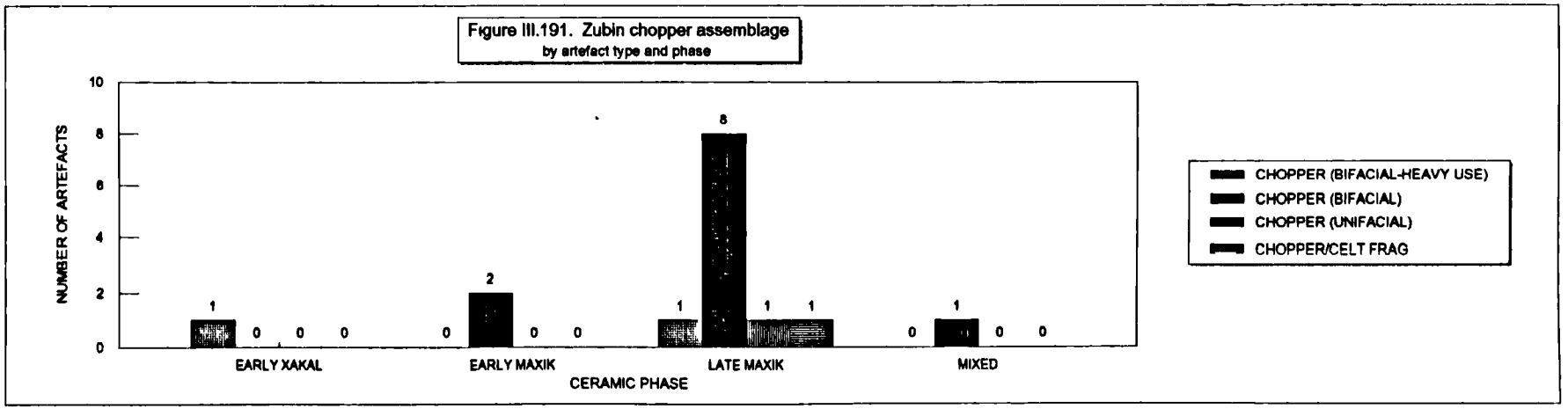
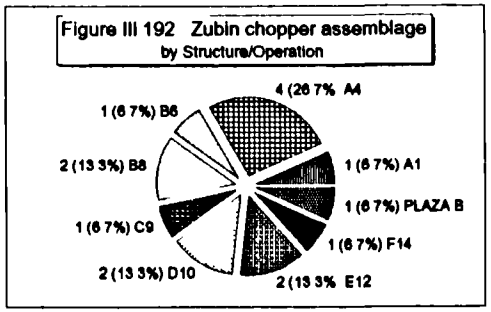


Table III.75. Zubin chopper assemblage by artefact type and Structure/Operation.

	A1	A4	B6	B8	C9	D10	E12	F14	PLAZA B	TOTAL	PERCENTAGE
CHOPPER (BIFACIAL HEAVY USE)	0	1	0	0	0	1	0	0	0	2	13.33
CHOPPER (BIFACIAL)	1	2	1	2	1	1	2	0	1	11	73 33
CHOPPER (UNIFACIAL)	0	1	0	0	0	0	0	0	0	1	6 67
CHOPPER/CELT FRAG.	0	0	0	0	0	0	0	1	0	1	6 67
TOTAL	1	4	1	2	1	2	2	1	1	15	
PERCENTAGE	6 67	26 67	6 67	13 33	6 67	13.33	13.33	6 67	6 67		100%



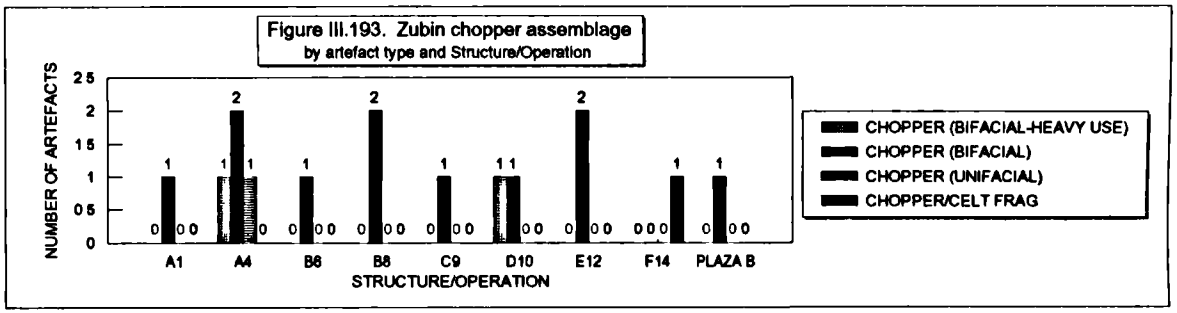
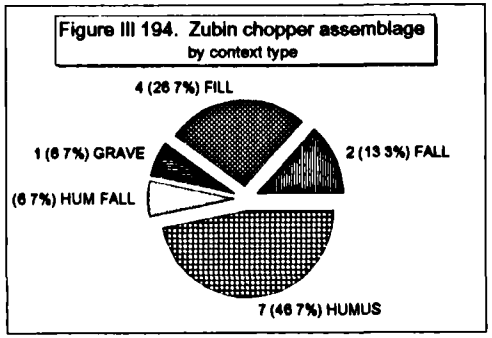
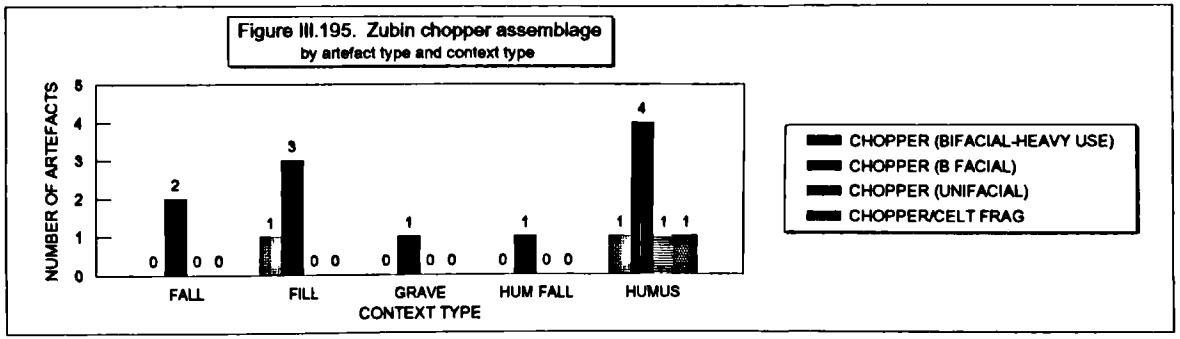


Table III.76. Zubin chopper assemblage by artefact type and context type.

	FALL	FILL	GRAVE	HUM-FALL	HUMUS	TOTAL	PERCENTAGE
CHOPPER (BIFACIAL-HEAVY USE)	0	1	0	0	1	2	13.33
CHOPPER (BIFACIAL)	2	3	1	1	4	11	73 33
CHOPPER (UNIFACIAL)	0	0	0	0	1	1	6.67
CHOPPER/CELT FRAG	0	0	0	0	1	1	6.67
TOTAL	2	4	1	1	7	15	
PERCENTAGE	13 33	26 67	6.67	6 67	46.67		100%

NOTE HUM-FALL = HUMUS/FALL





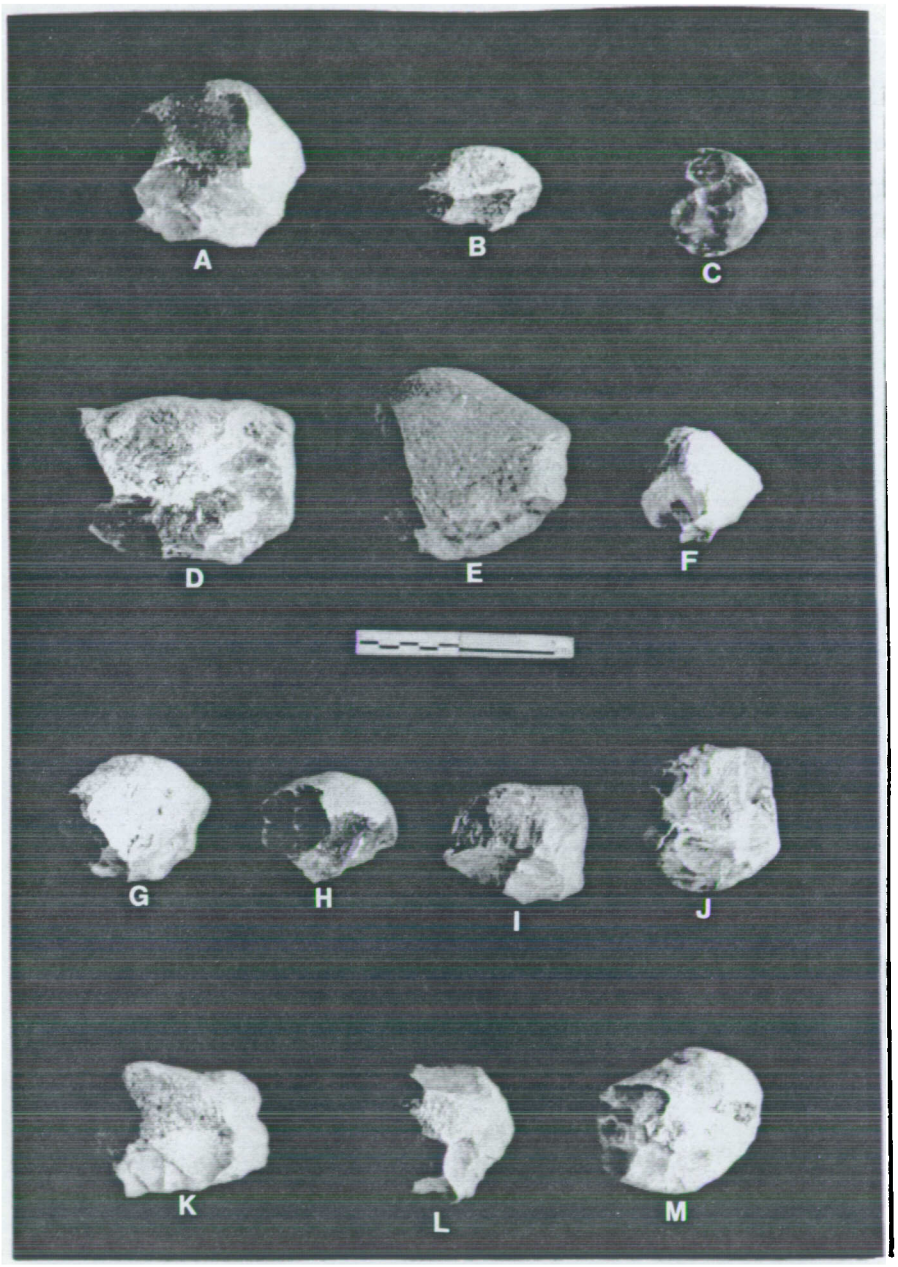
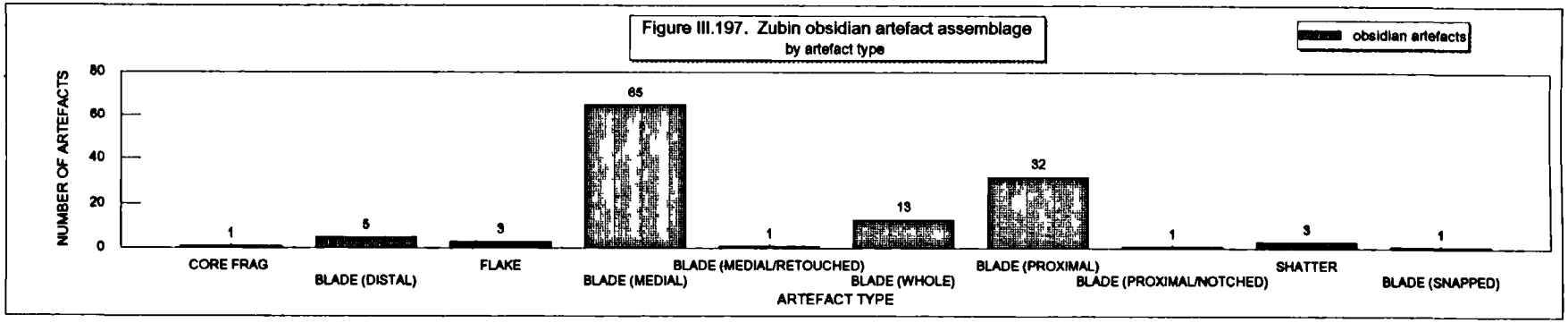
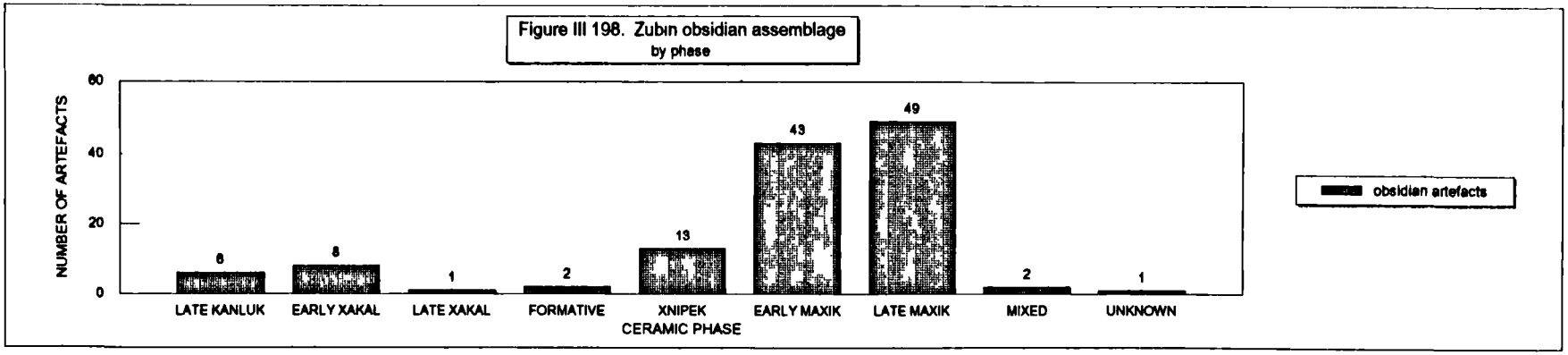


Figure III 196. Bifacial choppers (a, b, d-i, k-m), and heavily used bifacial choppers (c, j) from Zubin (a) A1-SF 299, (b) A2-SF 7, (c) A4-SF 104, (d) A4-SF/119, (e) A4-SF 98, (f) B6-SF 22, (g) B8-SF/37, (h) B8-SF/52, (i) C9-SF 58, (j) D10-SF 3, (k) D10-SF 7, (l) E12-SF/23, (m) E12-SF 29

Table III.77. Zubin obsidian assemblage by artefact type and phase.

	LATE KANLUK	EARLY XAKAL	LATE XAKAL	FORMATIVE	XNIPEK	EARLY MAXIK	LATE MAXIK	MIXED	UNKNOWN	TOTAL	PERCENTAGE
CORE FRAG	0	0	0	0	1	0	0	0	0	1	0 80
BLADE (DISTAL)	2	0	0	0	0	1	2	0	0	5	4 00
FLAKE	0	1	0	0	1	0	1	0	0	3	2 40
BLADE (MEDIAL)	1	4	1	2	7	20	28	1	1	65	52 00
BLADE (MEDIAL/RETOUCHED)	0	0	0	0	0	0	1	0	0	1	0 80
BLADE (WHOLE)	0	0	0	0	0	11	2	0	0	13	10 40
BLADE (PROXIMAL)	2	0	0	0	4	11	14	1	0	32	25 60
BLADE (PROXIMAL/NOTCHED)	0	0	0	0	0	0	1	0	0	1	0 80
SHATTER	0	3	0	0	0	0	0	0	0	3	2 40
BLADE (SNAPPED)	1	0	0	0	0	0	0	0	0	1	0 80
TOTAL	6	8	1	2	13	43	49	2	1	125	
PERCENTAGE	4 80	6 40	0 80	1 60	10 40	34 40	39 20	1 60	0 80		100%





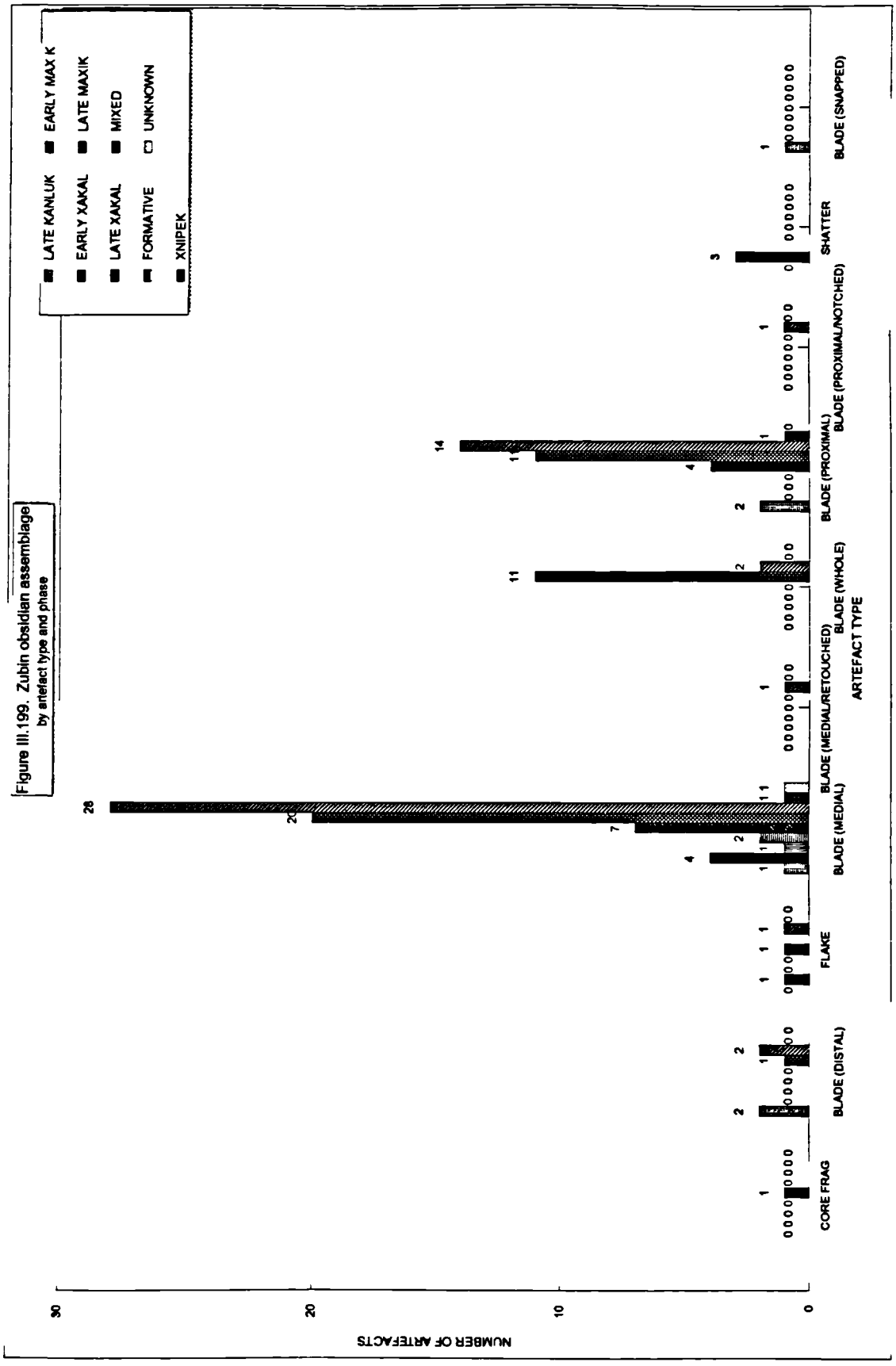
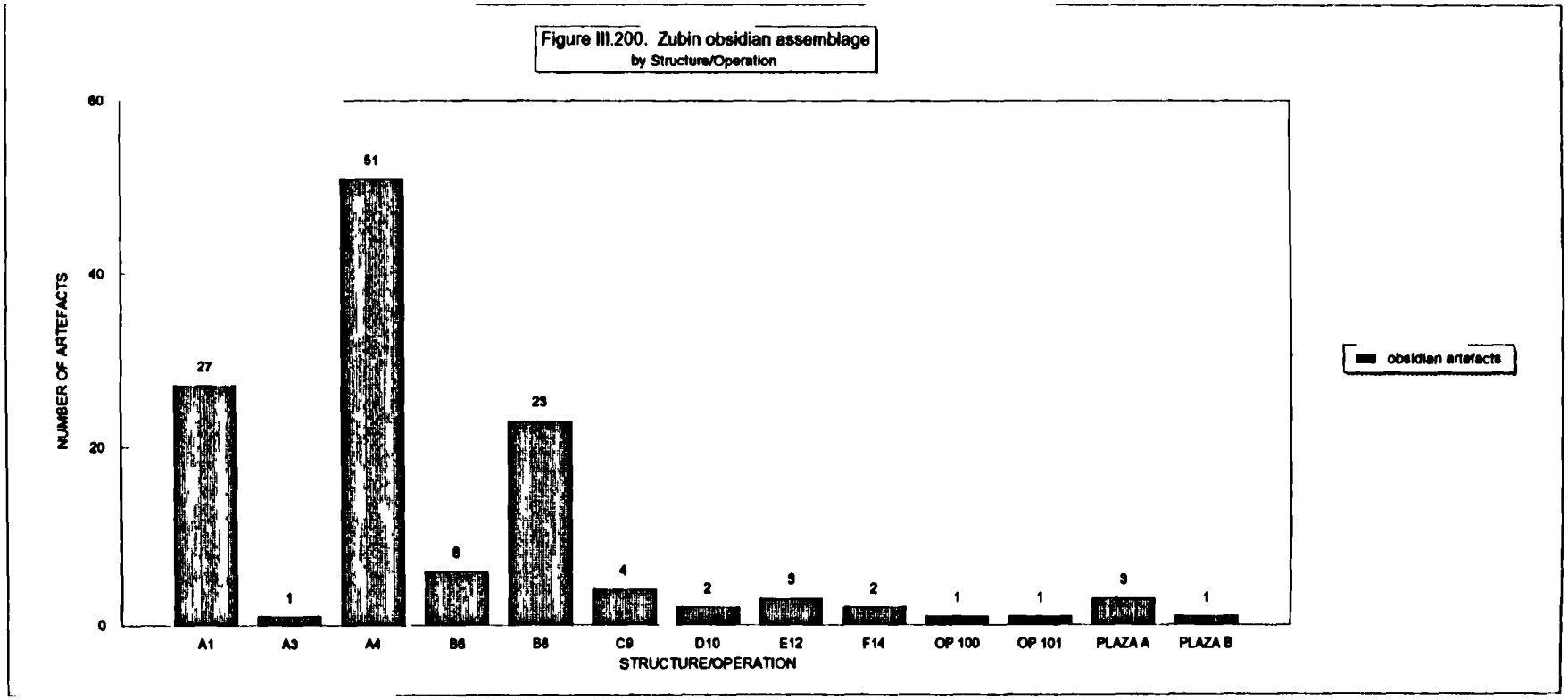


Figure III.199. Zubin obsidian assemblage by artefact type and phase
LATE KANLUK
EARLY MAX K
EARLY XAKAL
LATE MAXIK
LATE XAKAL
MIXED
FORMATIVE
UNKNOWN
XNIPEK
NUMBER OF ARTEFACTS
0
10
20
30
CORE FRAG
BLADE (DISTAL)
FLAKE
BLADE (MEDIAL)
BLADE (MEDIAL/RETOUCHED)
BLADE (WHOLE)
BLADE (PROXIMAL)
BLADE (PROXIMAL/NOTCHED)
SHATTER
BLADE (SNAPPED)
ARTEFACT TYPE

Table III.78. Zubin obsidian assemblage by artefact type and Structure/Operation.

	A1	A3	A4	B6	B8	C9	D10	E12	F14	OP 100	OP 101	PLAZA A	PLAZA B	TOTAL	PERCENTAGE
CORE FRAG	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0 80
BLADE (DISTAL)	3	0	0	0	0	0	1	0	0	0	0	1	0	5	4 00
FLAKE	0	0	2	0	0	0	0	0	1	0	0	0	0	3	2 40
BLADE (MEDIAL)	6	1	34	4	14	3	1	1	0	0	0	1	0	65	52 00
BLADE (MEDIAL/RETOUCHED)	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0 80
BLADE (WHOLE)	11	0	0	1	1	0	0	0	0	0	0	0	0	13	10 40
BLADE (PROXIMAL)	7	0	11	1	7	1	0	2	1	0	1	0	1	32	25 60
BLADE (PROXIMAL/NOTCHED)	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0 80
SHATTER	0	0	3	0	0	0	0	0	0	0	0	0	0	3	2 40
BLADE (SNAPPED)	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0 80
TOTAL	27	1	51	6	23	4	2	3	2	1	1	3	1	125	
PERCENTAGE	21 60	0 80	40 80	4 80	18 40	3 20	1 60	2 40	1 60	0 80	0 80	2 40	0 80		100%



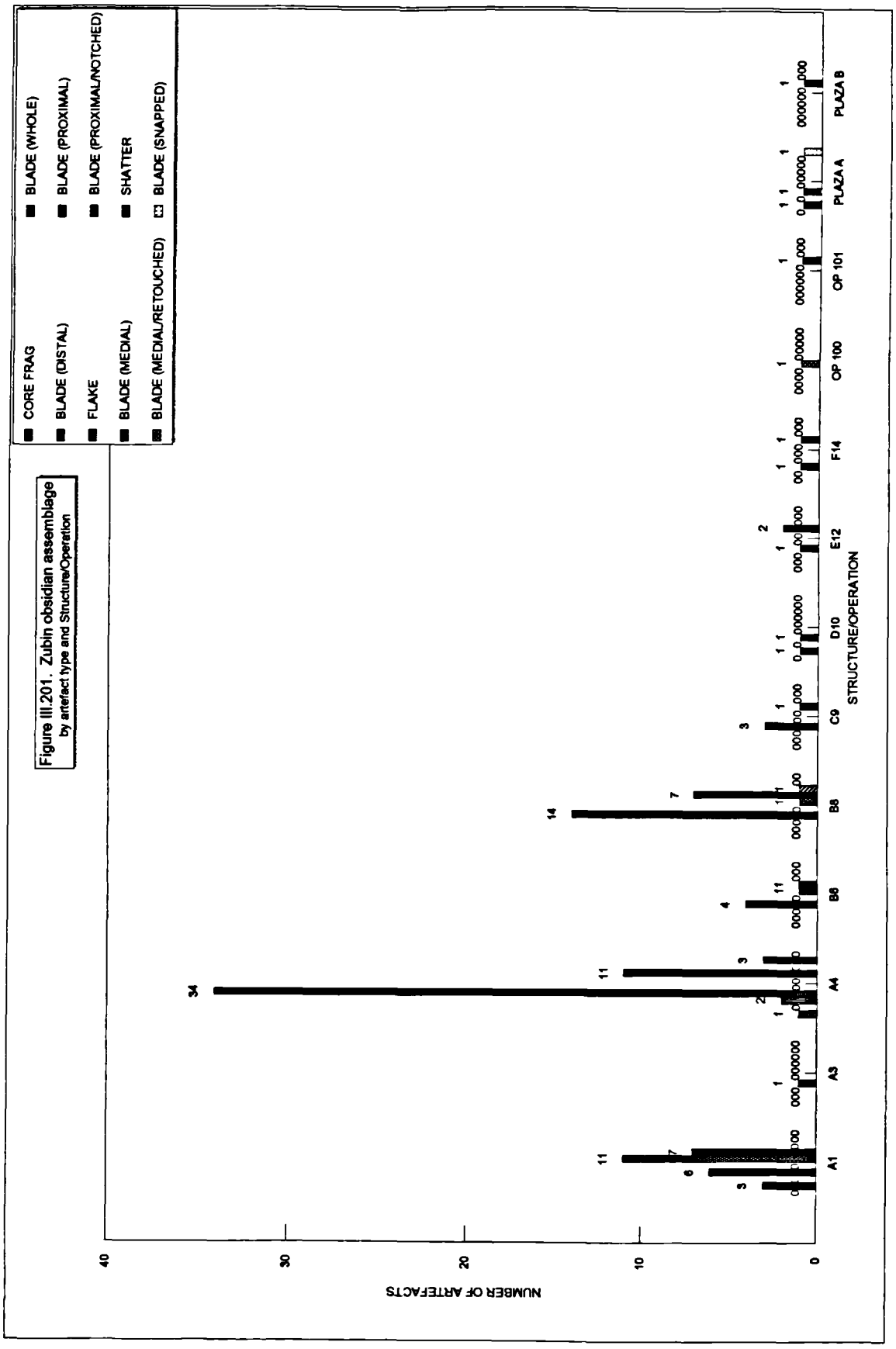


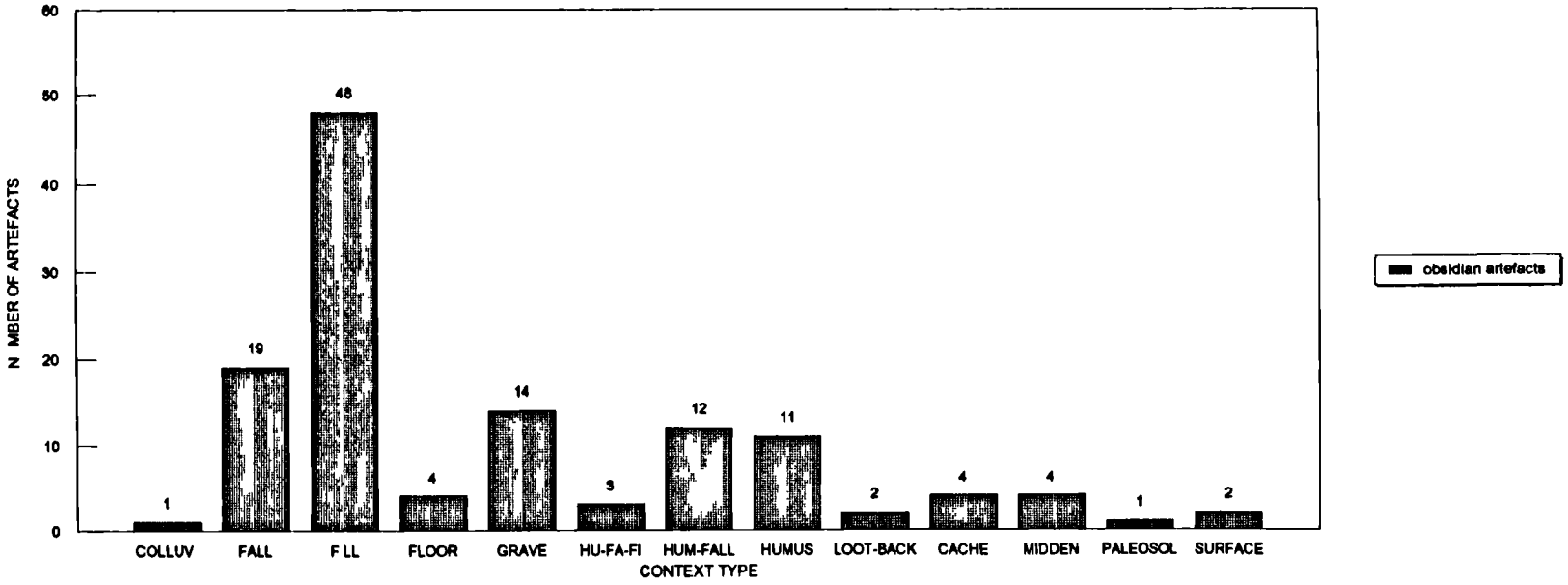
Figure III.201. Zubin obsidian assemblage by artefact type and Structure/Operation

Table III.79. Zubin obsidian assemblage by artefact type and context type.

	COLLUV	FALL	FILL	FLOOR	GRAVE	HU-FA-FI	HUM-FALL	HUMUS	LOOT-BACK	CACHE	MIDDEN	PALEOSOL	SURFACE	TOTAL	PERCENTAGE
CORE FRAG	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0 80
BLADE (DISTAL)	0	0	2	0	1	0	1	1	0	0	0	0	0	5	4 00
FLAKE	0	0	2	0	0	0	0	1	0	0	0	0	0	3	2 40
BLADE (MEDIAL)	0	9	29	3	1	3	8	8	2	1	1	0	2	65	52 00
BLADE (MEDIAL/RETOUCHED)	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0 80
BLADE (WHOLE)	0	2	0	0	8	0	0	0	0	3	0	0	0	13	10 40
BLADE (PROXIMAL)	1	8	11	1	4	0	2	2	0	0	2	1	0	32	25 60
BLADE (PROXIMAL/NOTCHED)	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0 80
SHATTER	0	0	3	0	0	0	0	0	0	0	0	0	0	3	2 40
BLADE (SNAPPED)	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0 80
TOTAL	1	19	48	4	14	3	12	11	2	4	4	1	2	125	
PERCENTAGE	0 80	15 20	38.40	3.20	11.20	2 40	9.60	8.80	1.60	3.20	3.20	0.80	1 60		100%

NOTE COLLUV = COLLUVIUM HU-FA-FI = HUMUS/FALL/FILL, HUM-FALL = HUMUS/FALL, LOOT-BACK = LOOTER'S BACKDIRT

Figure III.202 Zubin obsidian assemblage by context type



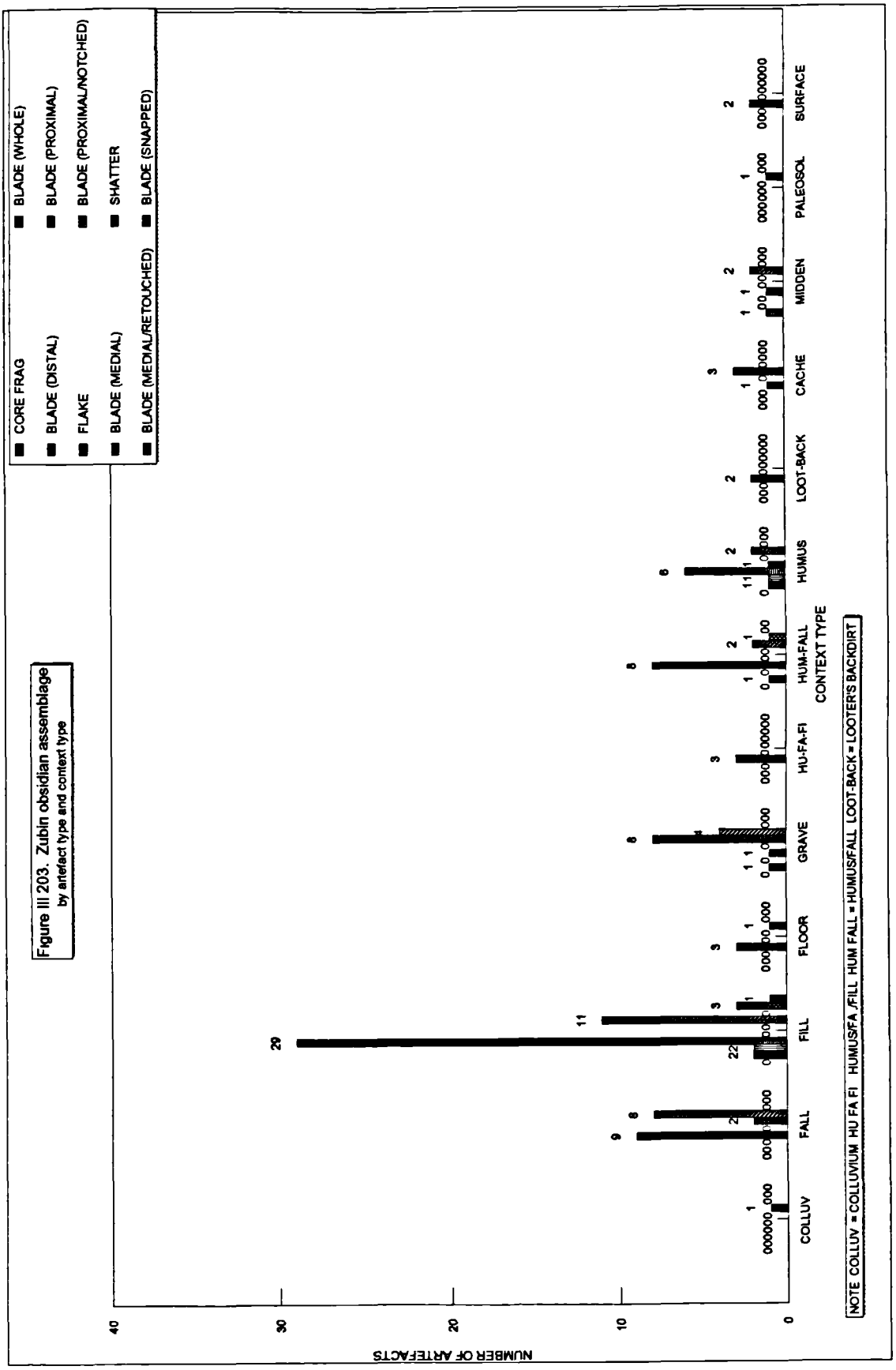
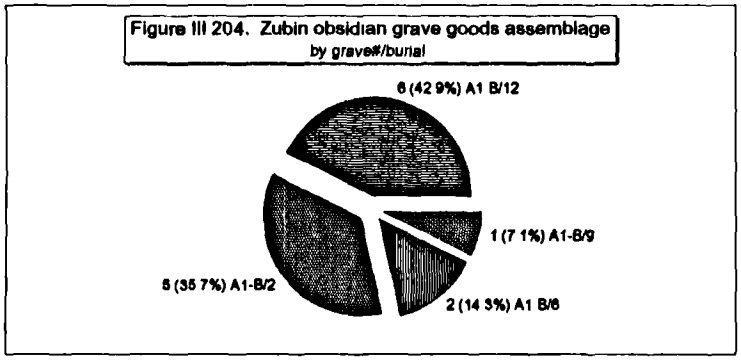
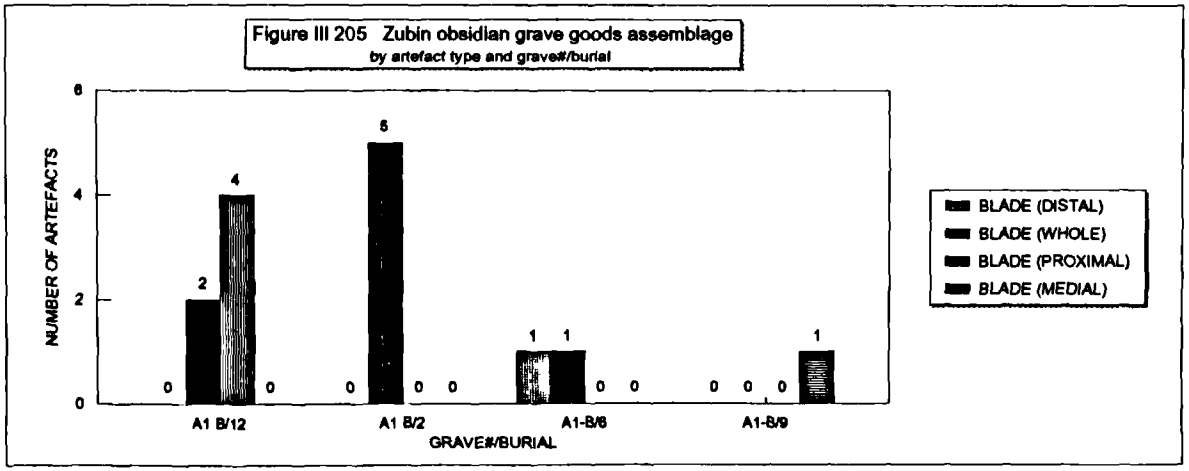


Figure III 203. Zubin obsidian assemblage by artefact type and context type
CORE FRAG
BLADE (DISTAL)
FLAKE
BLADE (MEDIAL)
BLADE (MEDIAL/RETOUCHED)
BLADE (WHOLE)
BLADE (PROXIMAL)
BLADE (PROXIMAL/NOTCHED)
SHATTER
BLADE (SNAPPED)
NUMBER OF ARTEFACTS
0
10
20
30
40
COLLUV
FALL
FILL
FLOOR
GRAVE
HU-FA-FI
HUM-FALL
HUMUS
LOOT-BACK
CACHE
MIDDEN
PALEOSOL
SURFACE
CONTEXT TYPE
NOTE COLLUV = COLLUVIUM HU FA FI HUMUS/FA /FILL HUM FALL = HUMUS/FALL LOOT-BACK = LOOTER'S BACKDIRT

Table III.80. Zubin obsidian grave goods assemblage by artefact type and grave#/burial.

	A1 B/12	A1 B/2	A1-B/6	A1-B/9	TOTAL	PERCENTAGE
BLADE (DISTAL)	0	0	1	0	1	7.14
BLADE (WHOLE)	2	5	1	0	8	57.14
BLADE (PROXIMAL)	4	0	0	0	4	28.57
BLADE (MEDIAL)	0	0	0	1	1	7.14
TOTAL	6	5	2	1	14	
PERCENTAGE	42 86	35 71	14 29	7.14		100%





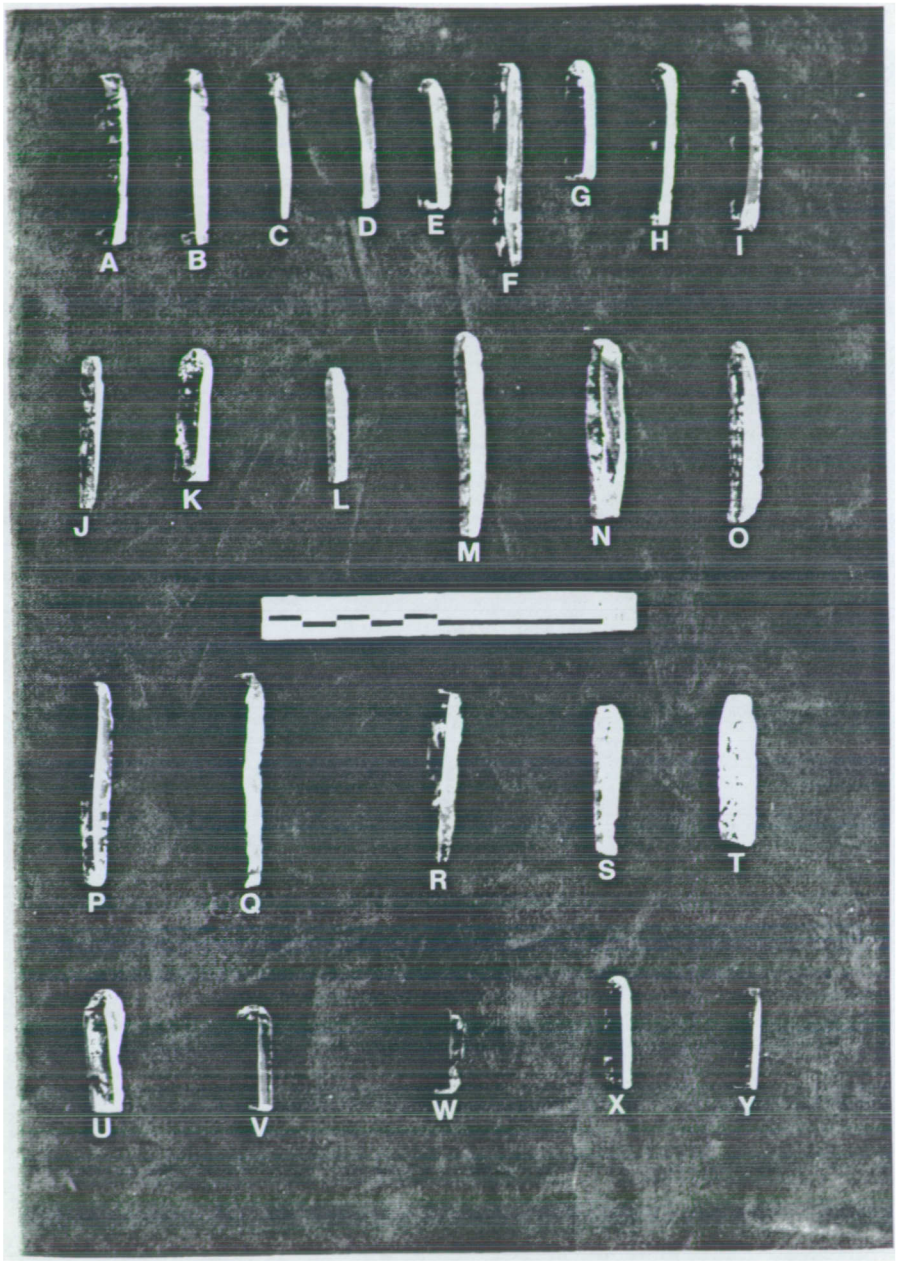


Figure III 206 Whole (a-c, e-i, m, o, p), proximal (j-l, q, s-v, y), proximal/notched (w), and medial (d, r, x) sections of obsidian blades from Zubin (a) A1-SF 4, (b) A1-SF 5, (c) A1-SF 3, (d) A4-SF 29, (e) A1-SF 11, (f) A1-SF 10, (g) A1-SF16, (h) A1-SF 7, (i) A1-SF/12, (j) A1-SF 233, (k) A1-SF/234, (l) A1-SF 235, (m) A1-SF 236, (n) A1-SF 237, (o) A1-SF 238, (p) A1-SF 36, (q) A4-SF 52, (r) B8-SF 16, (s) E12-SF 5, (t) E12-SF 6, (u) B8-SF 10, (v) B8-SF 9, (w) B8-SF 19, (x) C9-SF 6, (y) F14-SF 1

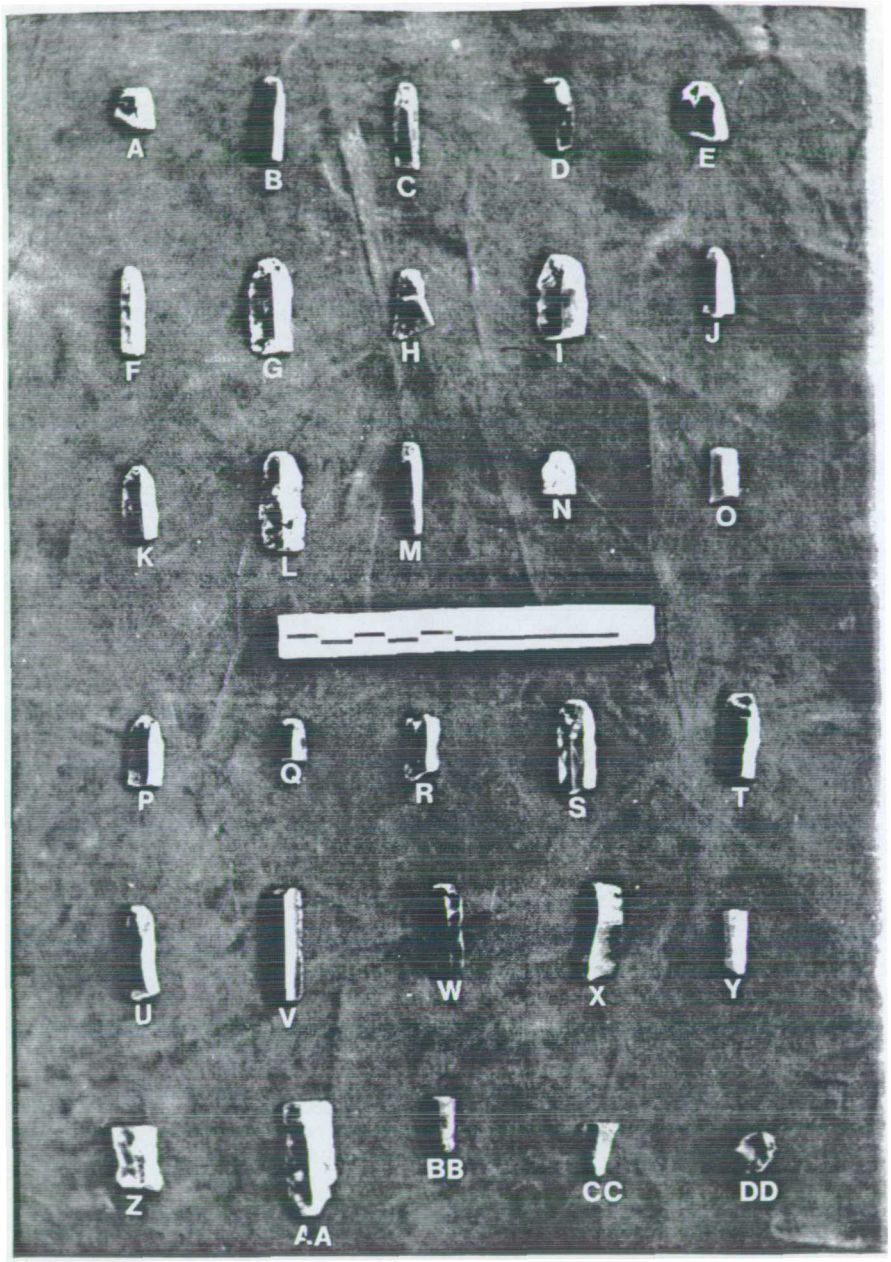


Figure III 207 Whole (d, u), proximal (a-c, e-k, n, p-t, w, bb), medial (l, o, z, aa, cc), distal (v), shatter (m), and core (dd) sections of obsidian blades from Zubin (a) A1-SF 34, (b) A1-SF 251, (c) A2-SF/1, (d) B6-SF 1, (e) B6-SF 6, (f) A4-SF 37, (g) A4-SF/33, (h) A4-SF 48, (i) A4-SF 3, (j) A4-SF 69, (k) A4-SF 7, (l) A4-SF 22, (m) A4-SF 60, (n) A4-SF 35, (o) B8-SF 27, (p) B8-SF/20, (q) B8-SF 28, (r) B8-SF 32, (s) B8-SF 21, (t) B8-SF 2; (u) B8-SF 4, (v) D10-SF 2, (w) 101-SF 1, (x) A1-SF 33, (y) A1-SF 252, (z A4-SF 30, (aa) A4-SF 26, (bb) A4-SF 42, (cc) 100-SF 1; (dd) A4-SF 146

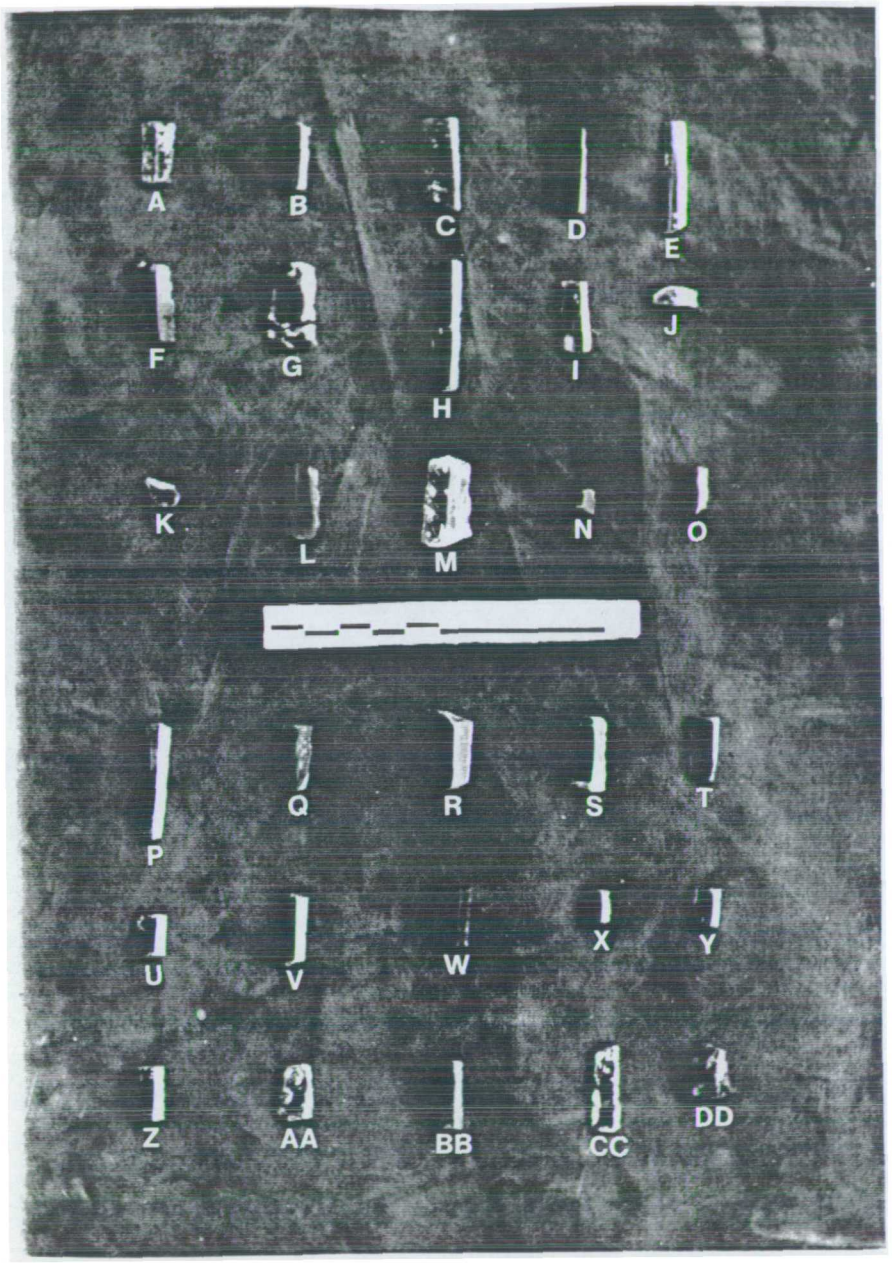


Figure III 208 Proximal (f), medial (a-g, i, l-cc), distal h), snapped (k), and flake (dd) sections of obsidian blades from Zubin (a) A1-SF 2, (b) A1-SF 6, (c) A1-SF 225, d) A1-SF 30, (e) A1-SF/15, (f) A1-SF 1, (g) A1-SF 18, (h) A1-SF 35, ( ) A3-SF 1, (j) AP-SF 2, (k) AP-SF 3, (l) AP-SF 1, (m) B6-SF 7, (n) B6-SF 2, (o) B6-SF 3, (p) B6-SF 4, (q) B8-SF 17; (r) B8-SF/18, (s) B8-SF 24, (t) B8-SF 25, (u) B8-SF 26, (v) B8-SF 29, (w) B8-SF 31, (x) B8-SF 30, (y) B8-SF 15, (z) B8-SF 13, (aa) B8-SF 12, (bb) B8-SF 14, (cc) E12-SF 7, (dd) F14-SF 4

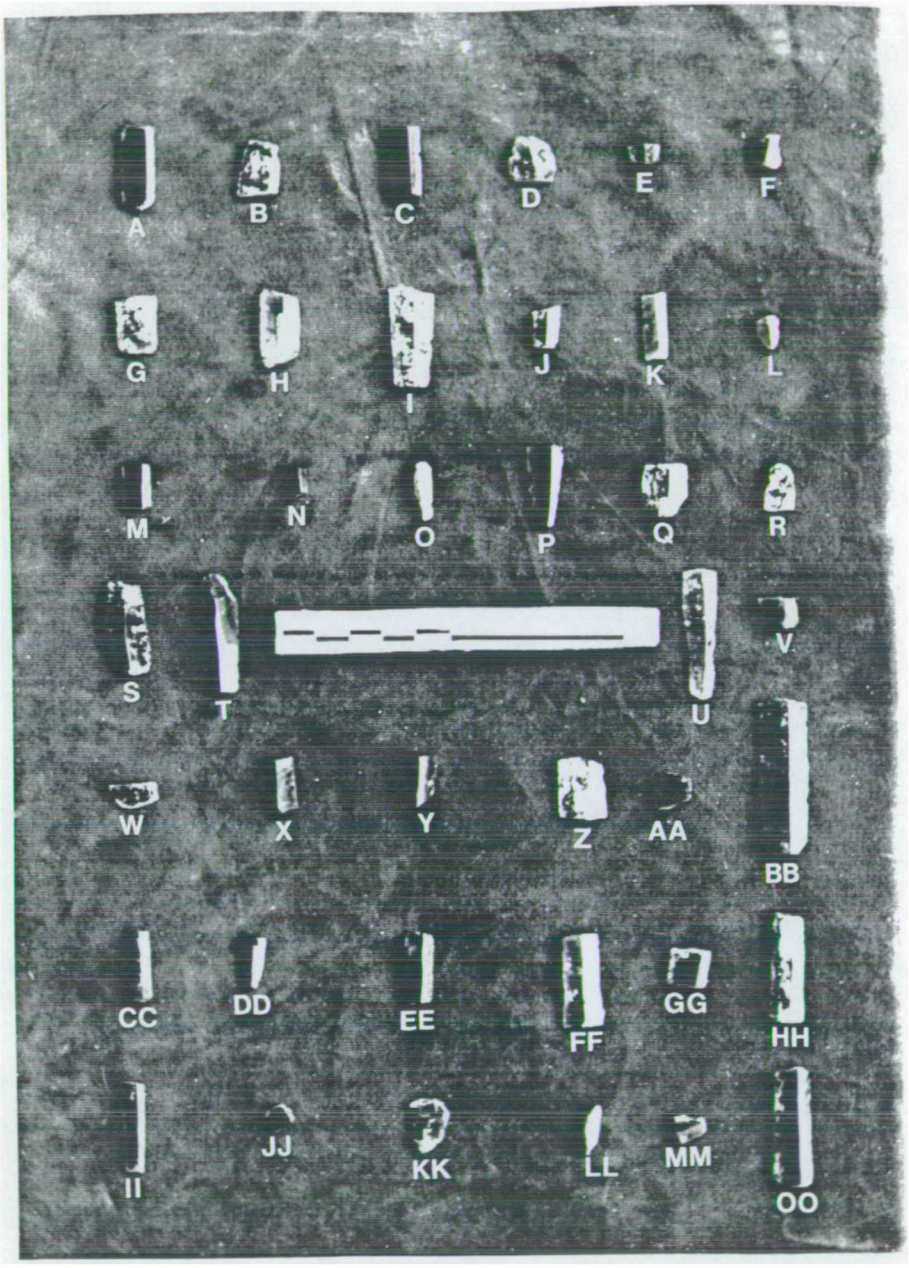
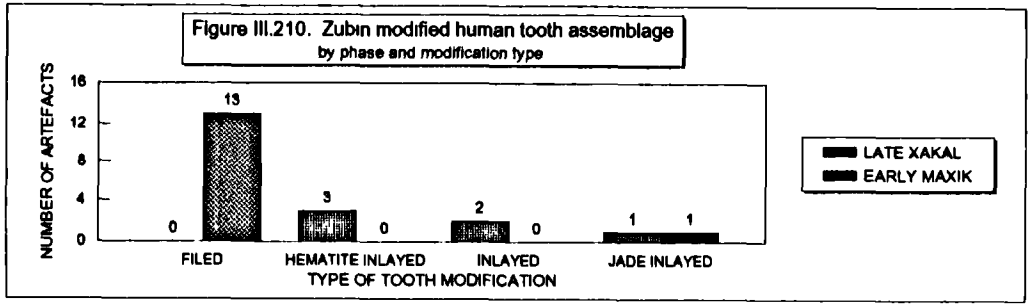


Figure III 209 Proximal (d, l, s), med al (a-c, e, g-k, m, n, p-r, t-jj, mm, oo), flake (p, kk), and shatter (o, ll) sections of obsidian blades from Zubin (a) C9-SF 4, (b) A4-SF 25, (c) D10-SF/1, (d) C9-SF 9, (e) C9-SF 8, (f) A4-SF 65, (g) A4-SF 27, (h) A4-SF 36, (i) A4-SF 31, (j) A4-SF 66, (k) A4-SF 67, (l) A4-SF 50, (m) A4-SF 68, (n) A4-SF 2, (o) A4-SF 59, (p) A4-SF 70, (q) A4-SF 4, (r) A4-SF 20, (s) A4-SF 10, (t) A4-SF 34, (u) A4-SF 53, (v) A4-SF 18, (w) A4-SF/19, (x) A4-SF/14, (y) A4-SF 17, (z) A4-SF 28, (aa) A4-SF 63, (bb) A4-SF 8, (cc) A4-SF 16, (dd) A4-SF 61, (ee) A4-SF 21, (ff) A4-SF/64, (gg) A4-SF 62, (hh) A4-SF 15, (ii) A4-SF 56, (jj) A4-SF 51, (kk) A4-SF 57, (ll) A4-SF 54, (mm) A4-SF 58, (oo) A4-SF 12

Table III 81. Zubin modified human tooth assemblage by phase and type.

	FILED	HEMATITE INLAYED	INLAYED	JADE INLAYED	TOTAL	PERCENTAGE
LATE XAKAL	0	3	2	1	6	30 00
EARLY MAXIK	13	0	0	1	14	70.00
TOTAL	13	3	2	2	20	
PERCENTAGE	65 00	15 00	10.00	10.00		100%

*NOTE "INLAYED" REFERS TO A M SSING INLAY (RAW MATERIAL COULD NOT BE DETERMINED)



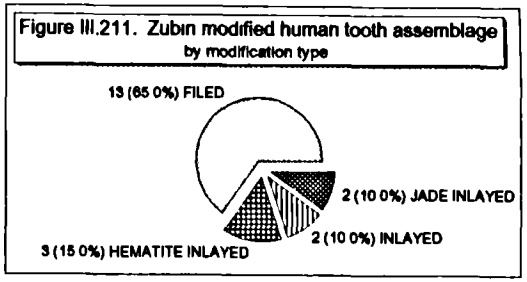
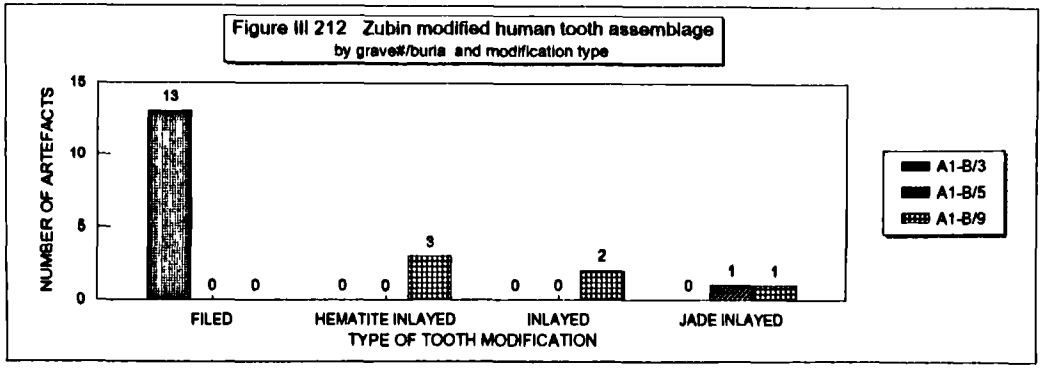
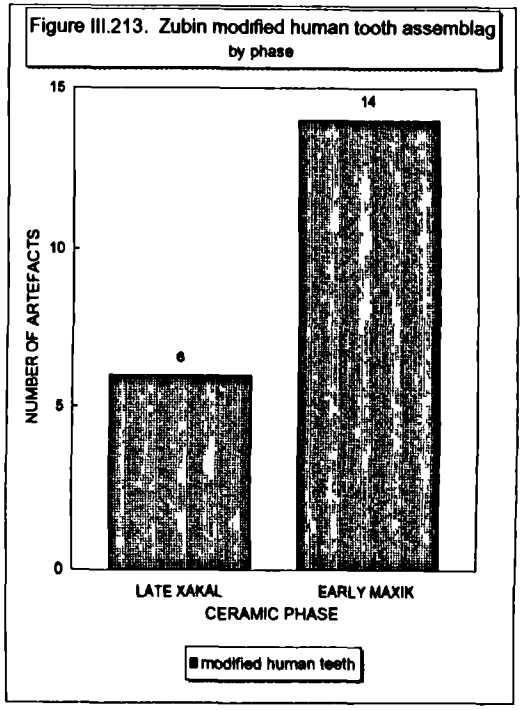


Table III.82. Zubin modified human tooth assemblage by grave#/ burial and modification type.

	FILED	HEMATITE INLAYED	INLAYED	JADE INLAYED	TOTAL	PERCENTAGE
A1 B/3	13	0	0	0	13	65.00
A1 B/5	0	0	0	1	1	5.00
A1 B/9	0	3	2	1	6	30.00
TOTAL	13	3	2	2	20	
PERCENTAGE	65 00	15 00	10.00	10 00		100%

*NOTE "INLAYED" REFERS TO A M SSING INLAY (RAW MATERIAL COULD NOT BE DETERMINED)





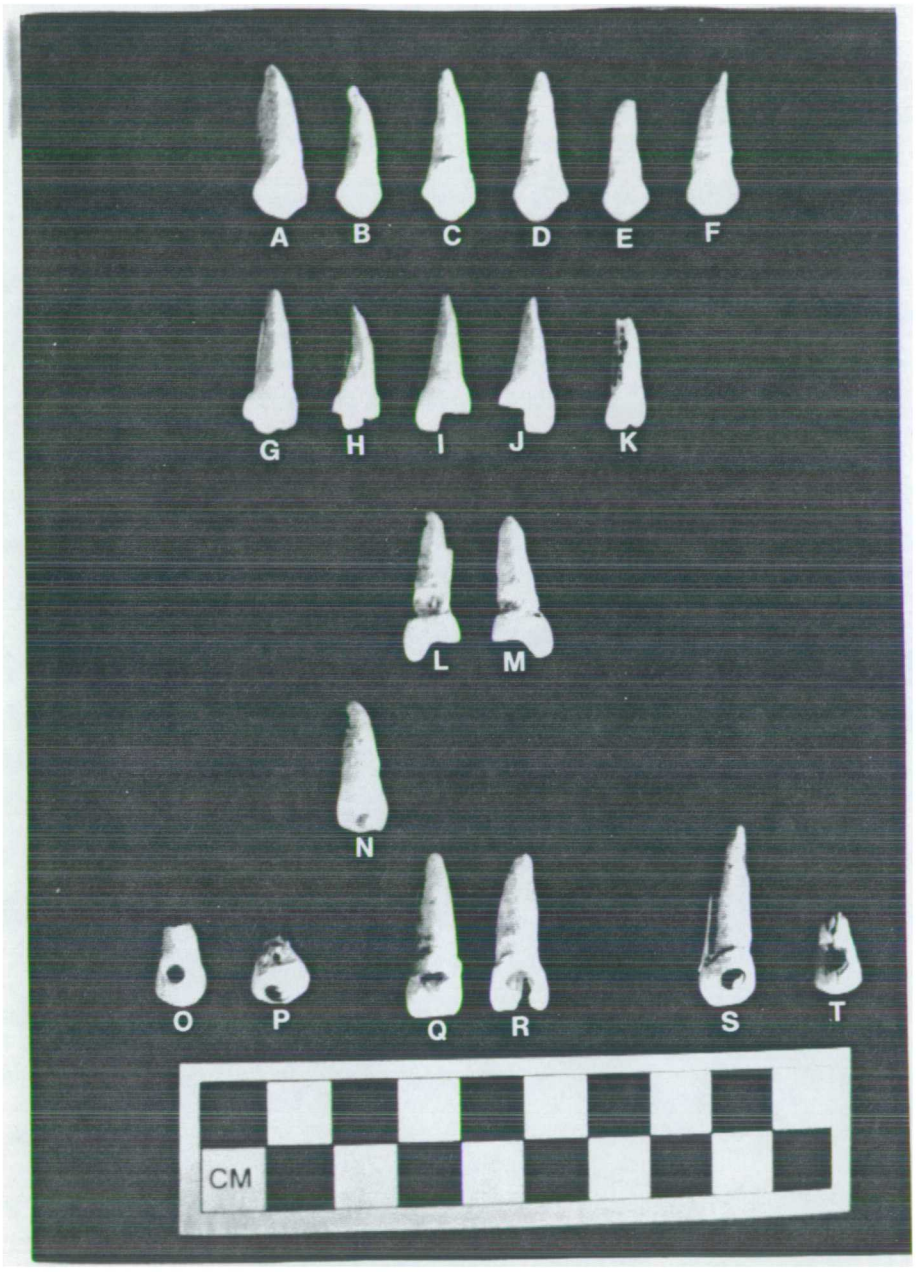


Figure III 214 Carved (a-m) and inlayed (n-t) human tooth assemblage from Zubin (a) A1-SF 306, (b) A1-SF 304, (c) A1-SF/303, (d) A1-SF 301, (e) A1-SF 305, (f) A1-SF 302, (g) A1-SF 256, (h) A1-SF 255, (i) A1-SF 254, (j) A1-SF 253, (k) A1-SF 257, (l) A1-SF 258, (m) A1-SF 259, (n) A1-SF 258 (o) A1-SF/265, (p) A1-SF 262, (q) A1-SF 260, (r) A1-SF 263, (s) A1-SF 261; (t) A1-SF 264

APPENDIX IV:

THE ZUBIN ARTEFACT DATA BASE BY SPECIAL FINDS NUMBER

SPECIAL FINDS MASTER BY:			SPECIAL FINDS NUMBER						
SF NO.	STR.	UNIT	LEVEL	CONTEXT	CONTEXT DESCRIPTION	PHASE	DATE	MATERIAL	DESCRIPTION
100 SF/1	OP 100	100 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE, RETOUCHED
100 SF/2	OP 100	100 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
101 SF/1	OP 101	101 1	2	COLLUV.	COLLUVIUM	LATE MAXIK	750-875 A D	OBSIDIAN	PROXIMAL SECTION OF BLADE
101 SF/2	OP 101	101 2	1	HUMUS	SLOPEWASH, HUMUS	LATE MAXIK	750-875 A D.	LIMESTONE	SPINDLE WHORL
101 SF/3	OP 101	101 1	3	COL /SPALL	COLLUVIUM, WALL SPALLING	LATE MAXIK	750-875 A D	CHERT	BIFACE
A1 SF/1	A1	A1 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/2	A1	A1 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/3	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/4	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/5	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/6	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/7	A1	A1 2	2	FILL	CONTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CERAMIC	MODIFIED SHERD
A1 SF/8	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL BEAD
A1 SF/9	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/10	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/11	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/12	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/13	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	SHELL	SPONDYLUS SHELL ROSETTE
A1 SF/14	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	SHELL	SPONDYLUS SHELL ROSETTE
A1 SF/15	A1	A1 1	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/16	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/17	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/18	A1	A1 1	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/19	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	MAMMALIA	DRILLED CANIS TOOTH
A1 SF/20	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED CANIS TOOTH
A1-SF/21	A1	A1 1	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CERAMIC	DRILLED SHERD
A1 SF/22	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	ORANGE WALK INCISED BOWL
A1 SF/23	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CERAMIC	ORANGE WALK INCISED BOWL
A1 SF/24	A1	A1 2	A1-B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CERAMIC	DOLPHIN HEAD RED PLATE
A1 SF/25	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	CERAMIC	DOLPHIN HEAD RED BOWL
A1 SF/26	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	CERAMIC	DOLPHIN HEAD RED BOWL
A1 SF/27	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	CERAMIC	SAXCHE ORANGE POLYCHROME BOWL
A1 SF/28	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	CERAMIC	DOLPHIN HEAD RED BOWL
A1 SF/29	A1	A1 2	1	SURFACE	SURFACE DEPOSIT	LATE MAXIK	750-875 A D.	LIMESTONE	BEAD
A1 SF/30	A1	A1 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/31	A1	A1 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	CERAMIC	FIGURINE HEAD
A1 SF/32	A1	A1 5	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	CERAMIC	DRILLED SHERD
A1 SF/33	A1	A1 5	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	DISTAL SECTION OF BLADE
A1 SF/34	A1	A1-4	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/35	A1	A1 3	A1 B/6	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	DISTAL SECTION OF BLADE
A1 SF/36	A1	A1 3	A1 B/6	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/37	A1	A1-4,5	A1-B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED FELIS TOOTH
A1 SF/38	A1	A1-4,5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED FELIS TOOTH
A1 SF/39	A1	A1 3	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SHELL	CONCH SHELL ADORNO

A1 SF/40	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	OLIVE SHELL TINKLER
A1 SF/41	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	OLIVE SHELL TINKLER
A1 SF/42	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	OLIVE SHELL TINKLER
A1 SF/43	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	OLIVE SHELL TINKLER
A1 SF/44	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	AVES	DRILLED AVIAN LONG BONE
A1 SF/45	A1	A1 2	A1-B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	WORKED CONCH SHELL SECTION
A1 SF/46	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	CONCH SHELL RECTANGULATE
A1 SF/47	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A.D.	SHELL	CONCH SHELL RECTANGULATE
A1 SF/48	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	CONCH SHELL RECTANGULATE
A1 SF/49	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	CONCH SHELL RECTANGULATE
A1 SF/50	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A D.	SHELL	FRESHWATER CLAM (RIGHT VALVE)
A1 SF/51	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	FRESHWATER CLAM (DRILLED)
A1 SF/52	A1	A1 2	A1-B/8	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL BEAD
A1 SF/53	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL INLAY
A1 SF/54	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL INLAY
A1-SF/55	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL BEAD
A1 SF/56	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	LARGE JADEITE BEAD
A1 SF/57	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	LIMESTONE	SPINDLE WHORL
A1 SF/58	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	HUMAN	JADEITE INLAYED TOOTH
A1 SF/60	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/61	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/62	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/63	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/64	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/65	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/66	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/67	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/68	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/69	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/70	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/71	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/72	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/73	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/74	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/75	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/76	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/77	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/78	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/79	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/80	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/81	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/82	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/83	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/84	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/85	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/86	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD

A1 SF/87	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/88	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/89	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/90	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/91	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/92	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/93	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/94	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/95	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/96	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/97	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/98	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/99	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/100	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/101	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/102	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/103	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/104	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/105	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/106	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/107	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/108	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1-SF/109	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/110	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/111	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/112	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/113	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/114	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/115	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/116	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/117	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/118	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/119	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/120	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/121	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/122	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/123	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/124	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/125	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/126	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/127	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/128	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/129	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/130	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/131	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/132	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD

A1 SF/133	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/134	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/135	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/136	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/137	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/138	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/139	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/140	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/141	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/142	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/143	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/144	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/145	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/146	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/147	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/148	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/149	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/150	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/151	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/152	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/153	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/154	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/155	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/156	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/157	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/158	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/159	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/160	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/161	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/162	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/163	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/164	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/165	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/166	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/167	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/168	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/169	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/170	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/171	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/172	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/173	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/174	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/175	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/176	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/177	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/178	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD

A1 SF/179	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/180	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/181	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/182	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/183	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/184	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/185	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/186	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/187	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/188	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/189	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/190	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/191	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/192	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/193	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/194	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/195	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/196	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/197	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/198	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/199	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/200	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/201	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/202	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/203	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/204	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/205	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/206	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1-SF/207	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/208	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/209	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/210	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/211	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/212	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/213	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/214	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/215	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1-SF/216	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/217	A1	A1 3	A1 B 5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/218	A1	A1 3	A1 B 5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/219	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/220	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/221	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/222	A1	A1 3	A1 B/6	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/223	A1	A1 3	A1 B/7	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/224	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A.D.	JADEITE	JADEITE BEAD

A1 SF/225	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/226	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	MAMMALIA	WORKED UNGULATE BONE
A1 SF/227	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	AVES	MODIFIED AVIAN LONG BONE
A1-SF/228	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	SHELL	FRESHWATER CLAM (DRILLED)
A1 SF/229	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	SHELL	CONCH SHELL DISK
A1 SF/230	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	SHELL	CONCH SHELL DISK
A1 SF/231	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	SHELL	CONCH SHELL ADORNO
A1 SF/232	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	CONCH SHELL ADORNO
A1-SF/233	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/234	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/235	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/236	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/237	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/238	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/239	A1	A1-4	A1 F/1	CACHE	SUBFLOOR CACHE	EARLY MAXIK	675-750 A.D.	CERAMIC	SAN PEDRO IMPRESSED DISH
A1 SF/240	A1	A1-4	A1 F/1	CACHE	SUBFLOOR CACHE	EARLY MAXIK	675-750 A D.	CERAMIC	SAN PEDRO IMPRESSED DISH
A1 SF/241	A1	A1-4	A1-F/1	CACHE	SUBFLOOR CACHE	EARLY MAXIK	675-750 A D.	CERAMIC	MOUNT MALONEY BLACK BOWL
A1 SF/242	A1	A1-4	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	SOTERO RED BROWN VASE
A1 SF/243	A1	A1-4	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	GARBUTT CREEK RED BOWL
A1 SF/244	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	MOUNTAIN PINE RED DISH
A1 SF/245	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CERAMIC	MONTEGO POLYCHROME VASE
A1 SF/246	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	CERAMIC	PUCTE BROWN? JAR
A1 SF/247	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	CERAMIC	PUCTE BROWN? BOWL
A1 SF/248	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	CERAMIC	PUCTE BROWN? BOWL
A1 SF/249	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE BODY/LEG FRAG.
A1 SF/250	A1	A1-4	1	HUM FALL	HUMUS/FALL	EARLY MAXIK	750-875 A.D.	CERAMIC	DRILLED SHERD (CARVED)
A1 SF/251	A1	A1-4	7B	PALEOSOL	PALEOSOL	LATE KANLUK	650-350 B C.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/252	A1	A1-4	7	FILL	DIRT FILL	LATE KANLUK	650-350 B C	OBSIDIAN	DISTAL SECTION OF BLADE
A1 SF/253	A1	A1-5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D.	HUMAN	FILED TOOTH
A1 SF/254	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D	HUMAN	FILED TOOTH
A1 SF/255	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/256	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/257	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D	HUMAN	FILED TOOTH
A1 SF/258	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/259	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/260	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	HUMAN	JADEITE INLAYED TOOTH
A1 SF/261	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	HUMAN	HEMATITE INLAYED TOOTH
A1 SF/262	A1	A1-2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D	HUMAN	HEMATITE INLAYED TOOTH
A1 SF/263	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A D.	HUMAN	INLAYED TOOTH
A1 SF/264	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A.D.	HUMAN	HEMATITE INLAYED TOOTH
A1 SF/265	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	HUMAN	INLAYED TOOTH
A1-SF/266	A1	A1-4,5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	CERAMIC	PARTIAL BELIZE RED
A1 SF/267	A1	A1 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	METATE FRAG
A1 SF/268	A1	A1 5	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A.D.	GRANITE	MANO
A1 SF/269	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CHERT	BIFACE (POLISHED)
A1 SF/270	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CHERT	SCRAPER (CONVERGENT, NORMAL)

A1 SF/271	A1	A1-4	7	FILL	DIRT FILL	LATE KANLUK	650 350 B C.	CHERT	DRILL (UNIFACIAL)
A1-SF/272	A1	A1 3	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	CHERT	BIFACE FRAG
A1-SF/273	A1	A1-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
A1 SF/274	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG (THIN)
A1-SF/275	A1	A1-3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG (THIN)
A1-SF/276	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CHERT	MACROBLADE STEM
A1-SF/277	A1	A1-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	LIMESTONE	LEG?
A1-SF/278	A1	A1 2	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	CHERT	BIFACE FRAG (EXHAUSTED)
A1-SF/279	A1	A1-3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG
A1-SF/280	A1	A1-3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG (THIN)
A1-SF/281	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	HAMMERSTONE
A1-SF/282	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	MANO FRAG
A1 SF/283	A1	A1 3	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100 350 A D	LIMESTONE	RECTANGULATE
A1-SF/284	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	METATE FRAG
A1-SF/285	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	ANDESITE	CELT OR MANO
A1-SF/286	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	BASALT	METATE FRAG
A1 SF/287	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG
A1-SF/288	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	LIMESTONE	TRIANGULATE
A1-SF/289	A1	A1 1	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	QUARTZ MASSIVE	METATE FRAG
A1-SF/290	A1	A1 1	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	CHERT	BIFACE FRAG
A1-SF/291	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
A1-SF/292	A1	A1-3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG
A1-SF/293	A1	A1-4	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B C.-100A D	QUARTZITE	HAMMERSTONE
A1-SF/294	A1	A1 1	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	ANDESITE	MANO FRAG
A1 SF/295	A1	A1 1	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	CHERT	BIFACE PREFORM (DISCARD)
A1-SF/296	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	QUARTZITE	HAMMERSTONE
A1-SF/297	A1	A1-4	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	METATE FRAG
A1-SF/298	A1	A1-4	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG
A1-SF/299	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	QUARTZITE	CHOPPER (BIFACIAL)
A1-SF/300	A1	A1-3	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	LIMESTONE	AWL
A1 SF/301	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675 750 A D.	HUMAN	FILED TOOTH
A1-SF/302	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D.	HUMAN	FILED TOOTH
A1-SF/303	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D.	HUMAN	FILED TOOTH
A1-SF/304	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675 750 A D.	HUMAN	FILED TOOTH
A1-SF/305	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/306	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D.	HUMAN	FILED TOOTH
A2 SF/1	PLAZA B	A2 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A2-SF/2	PLAZA B	A2 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG
A2 SF/3	PLAZA B	A2 1	A2 F/1	CACHE	DED. CACHE	LATE MAXIK	750-875 A D.	CHERT	BIFACE
A2 SF/4	PLAZA B	A2 1	A2 F/1	CACHE	DED. CACHE	LATE MAXIK	750-875 A.D.	CHERT	BIFACE
A2 SF/5	PLAZA B	A2 1	A2 F/1	CACHE	DED. CACHE	LATE MAXIK	750-875 A D.	CHERT	BIFACE
A2 SF/6	PLAZA B	A2 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
A2-SF/7	PLAZA B	A2 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)
A2-SF/8	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	NOTCHED FLAKE
A2 SF/9	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
A2-SF/10	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG (THIN)

A2 SF/11	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE (EXHAUSTED)
A2-SF/12	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE PREFORM (DISCARD)
A2 SF/13	PLAZA B	A2 1	4	FILL	CONSTRUCTION FILL	LATE XAKAL	650-350 B.C.	LIMESTONE	AWL/CHISEL
A2 SF/14	PLAZA B	A2 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	HAMMERSTONE
A2 SF/15	PLAZA B	A2 1	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
A2 SF/16	PLAZA B	A2 1	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	MANO FRAG.
A3 SF/1	A3	A3 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A3 SF/2	A3	A3-1	BK DIRT	BK.DRT	BACKDIRT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
A3 SF/3	A3	A3 7	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A3 SF/4	A3	A3 6	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A3 SF/5	A3	A3 8	6	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	CHERT	BIFACE FRAG.
A3 SF/6	A3	A3-8	6	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	CHERT	DRILL/SCRAPER (NORMAL, CONVERGENT)
A3 SF/7	A3	A3-6	6	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	SLATE	CELT
A4 SF/1	A4	A4 3	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D	SHELL	FRESHWATER CLAM (CARVED)
A4 SF/2	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/3	A4	A4 3	4A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/4	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/5	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CERAMIC	DRILLED SHERD
A4 SF/6	A4	A4 3	2&3	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	CERAMIC	WHISTLE?
A4 SF/7	A4	A4 3	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/8	A4	A4 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/9	A4	A4 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A D.	LIMESTONE	BEAD
A4 SF/10	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/11	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	LIMESTONE	SPINDLE WHORL
A4 SF/12	A4	A4 2a	2&3	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/13	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A.D.	SHELL	CONCH SHELL ADORNO
A4 SF/14	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/15	A4	A4 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/16	A4	A4 2	1&2&3	HU FA FI	HUMUS/FALL/FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/17	A4	A4 2	1	HUMUS	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/18	A4	A4 2	1&2&3	HU-FA FI	HUMUS/FALL/FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/19	A4	A4 2	1&2&3	HU-FA FI	HUMUS/FALL/FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/20	A4	A4 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/21	A4	A4 2a	4a	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/22	A4	A4 5	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/23	A4	A4 1a	A4 F/2	CACHE	DED. CACHE	EARLY MAXIK	675-750 A.D.	CERAMIC	PARTIAL BENQUE VIEJO POLYCHROME
A4 SF/24	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	LIMESTONE	SPINDLE WHORL (CARVED)
A4 SF/25	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675 750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/26	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/27	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/28	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/29	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/30	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/31	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/32	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CERAMIC	SHERD BEAD
A4 SF/33	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE

A4 SF/34	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/35	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/36	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/37	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/38	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A.D	CERAMIC	FIGURINE BODY FRAG.
A4 SF/39	A4	A4 6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SHELL	OLIVE SHELL TINKLER
A4 SF/40	A4	A4 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SHELL	OLIVE SHELL TINKLER
A4 SF/41	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	JADEITE	MOSAIC INLAY
A4-SF/42	A4	A4 1a	6E	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/43	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	SHELL	CONCH SHELL PENDANT
A4 SF/44	A4	A4 2	10A	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C-100A.D.	SHELL	SHELL BEAD (SPECIES UNKNOWN)
A4 SF/45	A4	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CERAMIC	FIGURINE HEAD
A4 SF/46	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600 675 A.D.	AVES	MODIFIED AVIAN LONG BONE
A4 SF/47	A4	A4 3	6	FILL	CONSTRUCTION FILL	XNIPEK	600-675 A.D.	AVES	DRILLED AVIAN LONG BONE
A4 SF/48	A4	A4 1a	6E	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/49	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C. 100A.D	SHELL	SHELL BEAD (SPECIES UNKNOWN)
A4 SF/50	A4	A4 1a	7	FILL	CONSTRUCTION FILL	XNIPEK	600-675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/51	A4	A4 1a	7	FILL	CONSTRUCTION FILL	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/52	A4	A4 1a	6D	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/53	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/54	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C. 100A D	OBSIDIAN	SHATTER
A4 SF/55	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	BASALT	MANO FRAG
A4 SF/56	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C. 100A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4-SF/57	A4	A4-2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A D	OBSIDIAN	FLAKE
A4 SF/58	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/59	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C. 100A D	OBSIDIAN	SHATTER
A4 SF/60	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A D	OBSIDIAN	SHATTER
A4 SF/61	A4	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/62	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C. 100A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/63	A4	A4 2a	7	FILL	DIRT FILL	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/64	A4	A4 2a	7	FILL	DIRT FILL	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/65	A4	A4-2a	7	FILL	DIRT FILL	XNIPEK	600-675 A D	OBSIDIAN	FLAKE
A4 SF/66	A4	A4 3	6	FLOOR	FLOOR SURFACE DEPOSIT	XNIPEK	600 675 A.D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/67	A4	A4 3	6	FLOOR	FLOOR SURFACE DEPOSIT	XNIPEK	600-675 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/68	A4	A4 3	6	FLOOR	FLOOR SURFACE DEPOSIT	XNIPEK	600 675 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/69	A4	A4 3	6	FLOOR	FLOOR SURFACE DEPOSIT	XNIPEK	600-675 A D	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/70	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675 750 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/71	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	GRANITE	METATE FRAG
A4 SF/72	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	GRANITE	METATE FRAG
A4 SF/73	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	QUARTZITE	METATE FRAG
A4 SF/74	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/75	A4	A4 2a	8	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	GRANITE	GRINDING/POLISHING STONE
A4 SF/76	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	UTILIZED FLAKE
A4 SF/77	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG
A4 SF/78	A4	A4 3	6	FLOOR	FLOOR SURFACE DEPOSIT	XNIPEK	600-675 A.D	GRANITE	METATE FRAG
A4 SF/79	A4	A4 2a	8	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	CHERT	BIFACE FRAG.

A4 SF/80	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	MANO FRAG
A4 SF/81	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
A4 SF/82	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	CHERT	DRILL (DISTAL, BIFACIAL)
A4 SF/83	A4	A4 6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	SLATE	SLATE DEBITAGE (SAWN)
A4 SF/84	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	MANO FRAG
A4 SF/85	A4	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG
A4 SF/86	A4	A4 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A.D.	CHERT	CHOPPER (UNIFACIAL)
A4 SF/87	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	BIFACE PREFORM (DISCARD)
A4 SF/88	A4	A4 2a	2 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	GRINDING/POLISHING STONE
A4 SF/89	A4	A4 5	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	BASALT	SCRAPER/KNIFE (NORMAL, LATERAL)
A4 SF/90	A4	A4 2a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	SERPENTINE	GRINDING/POLISHING STONE
A4 SF/91	A4	A4 1	3B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE
A4 SF/92	A4	A4 1	3B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	CHERT	BIFACE PREFORM (DISCARD)
A4 SF/93	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	CHERT	BIFACE FRAG. (EXHAUSTED)
A4 SF/94	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	SCRAPER (NORMAL, LATERAL; TWO MARGINS)
A4 SF/95	A4	A4 2a	4a	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/96	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/97	A4	A4 1a	6B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG
A4 SF/98	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL)
A4 SF/99	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
A4 SF/100	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A.D.	CHERT	BIFACE FRAG
A4 SF/101	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A D	CHERT	BIFACE FRAG (EXHAUSTED)
A4 SF/102	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	BIFACE FRAG (THIN)
A4 SF/103	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	UTILIZED FLAKE
A4 SF/104	A4	A4 2a	9	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A D	CHERT	CHOPPER (BIFACIAL-HEAVY USE)
A4 SF/105	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/106	A4	A4 1	2C	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	MANO FRAG.
A4 SF/107	A4	A4 1	2C	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER/KNIFE (NORMAL, LATERAL)
A4 SF/108	A4	A4 1a	3F	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	SCRAPER (NORMAL, CONVERGENT)
A4 SF/109	A4	A4 1a	3F	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	QUARTZ MASSIVE	MANO FRAG
A4 SF/110	A4	A4 2a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/111	A4	A4 2a	4A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	SCRAPER /DRILL (NORMAL, TRANSVERSE)
A4 SF/112	A4	A4 3	4	FLOOR	FLOOR SURFACE DEPOSIT	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A4-SF/113	A4	A4 3	4	FLOOR	FLOOR SURFACE DEPOSIT	EARLY MAXIK	675-750 A.D	CHERT	BIFACE FRAG.
A4 SF/114	A4	A4 3	4	FLOOR	FLOOR SURFACE DEPOSIT	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/115	A4	A4 3	4	FLOOR	FLOOR SURFACE DEPOSIT	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A4 SF/116	A4	A4 3	4	FLOOR	FLOOR SURFACE DEPOSIT	EARLY MAXIK	675-750 A.D.	LIMESTONE	PESTLE?
A4 SF/117	A4	A4-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/118	A4	A4-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/119	A4	A4-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL)
A4 SF/120	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/121	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	QUARTZ MASSIVE	MANO FRAG.
A4 SF/122	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	DRILL (NORMAL, DISTAL)
A4 SF/123	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	CHERT	SCRAPER (NORMAL, TRANSVERSE)
A4 SF/124	A4	A4 2a	6b	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	GRANITE	METATE FRAG.
A4 SF/125	A4	A4 2a	4a	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.

A4 SF/126	A4	A4 2	1-3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/127	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A D.	QUARTZ MASSIVE	MANO FRAG.
A4-SF/128	A4	A4 2	1-3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	DRILL/GRAVER (NORMAL, DISTAL)
A4 SF/129	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A D.	CHERT	SCRAPER (NORMAL, DISTAL)
A4 SF/130	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A.D.	GRANITE	MANO FRAG.
A4 SF/131	A4	A4-6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/132	A4	A4 6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	UTILIZED FLAKE
A4 SF/133	A4	A4 6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	UTILIZED FLAKE
A4 SF/134	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	CHERT	DRILL (NORMAL, TRANSVERSE)
A4 SF/135	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/136	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675 750 A D	SLATE	WRENCH FRAG.
A4 SF/137	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/138	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG. (THIN)
A4 SF/139	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/140	A4	A4 2a	8B	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	CHERT	DRILL/BURIN (UNIFACIAL)
A4 SF/141	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	QUARTZITE	HAMMERSTONE
A4 SF/142	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/143	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A D	CHERT	BIFACE FRAG (EXHAUSTED)
A4 SF/144	A4	A4 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	DRILL (NORMAL, CONVERGENT)
A4 SF/145	A4	A4 2a	10	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A D	CHERT	BIFACE FRAG (EXHAUSTED)
A4-SF/146	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	CORE FRAG.
A4 SF/147	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	SCRAPER (NORMAL, CONVERGENT)
A4 SF/148	A4	A4 2a	5B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CERAMIC	DISK
A4 SF/149	A4	A4 1a	7	FILL	CONSTRUCTION FILL	XNIPEK	600-675 A.D.	CERAMIC	DRILLED SHERD
A4 SF/150	A4	A4 1a	A4 F/2	CACHE	DED. CACHE	EARLY MAXIK	675-750 A.D.	CERAMIC	PARTIAL MOUNT MALONEY BLACK
AP SF/1	PLAZA A	AP 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
AP SF/2	PLAZA A	AP 1	4	FILL	CONTRUCTION FILL	LATE KANLUK	650-350 B.C.	OBSIDIAN	DISTAL SECTION OF BLADE
AP SF/3	PLAZA A	AP 1	4	FILL	CONTRUCTION FILL	LATE KANLUK	650-350 B.C.	OBSIDIAN	SNAPPED PORTION OF BLADE
AP SF/4	PLAZA A	AP 1a	4	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE LEG
AP SF/5	PLAZA A	AP 1a	4	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE HAND
AP SF/6	PLAZA A	AP 1a	3	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	CHERT	BIFACE FRAG (EXHAUSTED)
AP SF/7	PLAZA A	AP-1a	3	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	CHERT	BIFACE FRAG.
B6 SF/1	B6	B6 2	2	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	OBSIDIAN	OBSIDIAN BLADE
B6 SF/2	B6	B6-2	2	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B6 SF/3	B6	B6-2	1	SURFACE	SURFACE DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B6-SF/4	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B6-SF/5	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	CERAMIC WHISTLE?, FLUTE?
B6-SF/6	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B6 SF/7	B6	B6-1b	3C	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B6 SF/8	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
B6-SF/9	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG
B6 SF/10	B6	B6 2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG
B6-SF/11	B6	B6 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A D.	QUARTZITE	HAMMERSTONE
B6 SF/12	B6	B6-1	3A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	SCRAPER (NORMAL, LATERAL)
B6 SF/13	B6	B6-1	3A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B6 SF/14	B6	B6-1a	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG. (THIN)

B6-SF/15	B6	B6-1a	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A.D.	CHERT	BIFACE FRAG.
B6 SF/16	B6	B6 1a	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER/KNIFE (NORMAL, CONVERGENT
B6-SF/17	B6	B6 1a	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
B6-SF/18	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	GROOVED SPHERE
B6 SF/19	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
B6 SF/20	B6	B6 1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG. (THIN)
B6 SF/21	B6	B6 1b	3C	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
B6 SF/22	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL)
B6 SF/23	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/1	B8	B8 1	2a	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	SHELL	WORKED CONCH SHELL SECTION
B8 SF/2	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/3	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	DRILLED SHERD
B8 SF/4	B8	B8-1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	OBSIDIAN BLADE
B8 SF/5	B8	B8 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	FIGURINE ARM
B8 SF/6	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	DRILLED SHERD
B8 SF/7	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	MODIFIED SHERD
B8 SF/8	B8	B8 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	MINIATURE UNSLIPPED VESSEL
B8 SF/9	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/10	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/11	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CERAMIC	BEAD
B8 SF/12	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/13	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/14	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/15	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/16	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/17	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/18	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/19	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE (NOTCHED)
B8 SF/20	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/21	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/22	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	CERAMIC	DISK
B8 SF/23	B8	B8 3	1	HUM-FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	CERAMIC	FIGURINE LEG
B8 SF/24	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/25	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/26	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/27	B8	B8 3a	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/28	B8	B8 2a	4	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/29	B8	B8 2a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/30	B8	B8 2a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/31	B8	B8 2a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/32	B8	B8 2a	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/33	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/34	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/35	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/36	B8	B8 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/37	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)

B8 SF/38	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE (EXHAUSTED)
B8 SF/39	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
B8 SF/40	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG
B8 SF/41	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/42	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D	GRANITE	METATE FRAG
B8 SF/43	B8	B8 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	GRANITE	MANO FRAG
B8 SF/44	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D	GRANITE	METATE FRAG.
B8 SF/45	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/46	B8	B8 3a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
B8 SF/47	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	BIFACE PREFORM (DISCARD)
B8 SF/48	B8	B8 2a	MIX	MIXED	WALL CLEARING	MAXIK	675-875 A.D	SLATE	WORKED FRAG.
B8 SF/49	B8	B8 2a	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D	CHERT	BIFACE FRAG. (EXHAUSTED)
B8 SF/50	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	BIFACE FRAG.
B8 SF/51	B8	B8 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	BIFACE FRAG.
B8 SF/52	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL)
B8 SF/53	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	BIFACE FRAG (EXHAUSTED)
B8 SF/54	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	DRILL/SCRAPER (NORMAL, CONVERGENT)
B8 SF/55	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	QUARTZITE	HAMMERSTONE
B8 SF/56	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	ANDESITE	METATE FRAG.
B8 SF/57	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/58	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/59	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/60	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/61	B8	B8 2a	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CHERT	BIFACE FRAG.
B8 SF/62	B8	B8 2	SURF	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
B8 SF/63	B8	B8 1	3A	FALL	FALL DEPOSIT	EARLY MAXIK	750-875 A D.	GRANITE	METATE FRAG.
C9-SF/1	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A D.	JADEITE	JADEITE BEAD
C9-SF/2	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	JADEITE	JADEITE BEAD
C9-SF/3	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A D.	JADEITE	JADEITE BEAD
C9 SF/4	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE 350 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
C9-SF/5	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D	JADEITE	JADEITE BEAD
C9-SF/6	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D	OBSIDIAN	MEDIAL SECTION OF BLADE
C9-SF/7	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	SHELL	CONCH SHELL BEAD
C9 SF/8	C9	C9-2	2	FALL	FALL DEPOSIT	MIXED	675 875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
C9-SF/9	C9	C9-4	2	FALL	FALL DEPOSIT	MIXED	675-875 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
C9-SF/10	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MIXED	675-875 A.D.	SLATE	PENDANT
C9-SF/11	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE HEAD
C9 SF/12	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE BODY FRAG
C9-SF/13	C9	C9 5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE BODY FRAG
C9 SF/14	C9	C9-5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE BODY FRAG.
C9-SF/15	C9	C9-5	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
C9-SF/16	C9	C9-5	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A D	SHELL	CONCH SHELL BEAD
C9 SF/17	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	SHELL	CONCH SHELL BEAD
C9-SF/18	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
C9 SF/19	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
C9 SF/20	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD

C9 SF/21	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9-SF/22	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	JADEITE	JADEITE BEAD
C9 SF/23	C9	LOOTER'S	C9 B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9 SF/24	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9 SF/25	C9	C9 5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9 SF/26	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/27	C9	C9-5	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C -100A.D	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/28	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/29	C9	C9 5	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/30	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/31	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/32	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/33	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	MODIFIED PEBBLE
C9-SF/34	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/35	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/36	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/37	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/38	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/39	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/40	C9	LOOTER'S	C9 B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/41	C9	LOOTER'S	C9 B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650 350 B C.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/42	C9	C9-5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE HEAD
C9 SF/43	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9 SF/44	C9	C9 5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9 SF/45	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE LEG
C9 SF/46	C9	C9 5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9 SF/47	C9	C9-5	9	FILL	CONSTRUCTION FILL	EARLY KANLUK	900-650 B.C.	CERAMIC	FIGURINE LEG?
C9 SF/48	C9	LOOTER'S	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/49	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	MODIFIED PEBBLE
C9 SF/50	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	MODIFIED PEBBLE
C9 SF/51	C9	C9-5	3	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	SYENITE	METATE FRAG.
C9-SF/52	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	CHERT	BIFACE (IRREGULAR)
C9 SF/53	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A D.	QUARTZITE	PESTLE
C9 SF/54	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A D.	CHERT	BIFACE PREFORM (DISCARD)
C9 SF/55	C9	C9-4	2	FALL	FALL DEPOSIT	MIXED	675-875 A.D.	CHERT	SCRAPER (ALTERNATE, LATERAL)
C9 SF/56	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MIXED	675-875 A.D.	SLATE	DISK (BROKEN)
C9 SF/57	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MIXED	675-875 A.D.	CHERT	BIFACE PREFORM (DISCARD)
C9 SF/58	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MIXED	675-875 A.D.	CHERT	CHOPPER (BIFACIAL)
C9 SF/59	C9	C9-4	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE PREFORM (DISCARD)
C9 SF/60	C9	C9-4	2	FALL	FALL DEPOSIT	MIXED	UNKOWN	CHERT	MACROBLADE STEM
C9 SF/61	C9	C9 5	4	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A D	QUARTZITE	GRINDING/POLISHING STONE
C9 SF/62	C9	LOOTER'S	C9 B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650 350 B.C.	SHELL	CONCH SHELL BEAD
C9-SF/63	C9	LOOTER'S	C9-B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
D10 SF/1	D10	D10 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
D10 SF/2	D10	D10 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	DISTAL SECTION OF BLADE
D10 SF/3	D10	D10 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL-HEAVY USE)

D10 SF/4	D10	D10 1	3C	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D	CHERT	BIFACE FRAG.
D10 SF/5	D10	D10 2	1A	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A D	CHERT	UTILIZED FLAKE
D10 SF/6	D10	D10 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BURIN/GRAVER/DRILL (UNIFACIAL)
D10 SF/7	D10	D10 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL)
D10 SF/8	D10	D10 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
D11-SF/1	D11	D11 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
E12 SF/1	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SHELL	OLIVE SHELL TINKLER
E12 SF/2	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SHELL	OLIVE SHELL TINKLER
E12 SF/3	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	LIMESTONE	EARPLUG FRAG.
E12 SF/4	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SLATE	WRENCH FRAG.
E12 SF/5	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
E12 SF/6	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
E12 SF/7	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
E12 SF/8	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	LIMESTONE	METATE FRAG.
E12 SF/9	E12	SURFACE	SURF	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
E12 SF/10	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG
E12 SF/11	E12	E12 1	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
E12-SF/12	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
E12 SF/13	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
E12 SF/14	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
E12 SF/15	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
E12 SF/16	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
E12-SF/17	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG.
E12 SF/18	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
E12 SF/19	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	LIMESTONE	MANO FRAG.
E12 SF/20	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	SCRAPER (NORMAL, TRANSVERSE)
E12 SF/21	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12 SF/22	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GABBRO	METATE FRAG.
E12 SF/23	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	CHOPPER (BIFACIAL)
E12 SF/24	E12	E12-1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12 SF/25	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG
E12 SF/26	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE PREFORM (DISCARD)
E12 SF/27	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	SCRAPER/DRILL (NORMAL, TRANSVERSE)
E12 SF/28	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12 SF/29	E12	E12 1	3-4 MIX	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)
F14 SF/1	F14	F14 1	2A	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
F14 SF/2	F14	F14 1	3	FILL	CONTRUCTION FILL	LATE MAXIK	750-875 A D.	LIMESTONE	BROKEN SPINDLE WHORL
F14 SF/3	F14	F14 1	3	FILL	CONTRUCTION FILL	LATE MAXIK	750-875 A.D.	CERAMIC	DRILLED SHERD
F14 SF/4	F14	F14 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	FLAKE
F14 SF/5	F14	F14 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	SHELL	WORKED CONCH SHELL SECTION
F14 SF/6	F14	SURFACE	SURF	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
F14 SF/7	F14	SURFACE	SURF	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
F14 SF/8	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER/CELT FRAG.
F14 SF/9	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	SCRAPER (NORMAL, LATERAL)
F14 SF/10	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	SCRAPER (NORMAL, CONVERGENT)
F14 SF/11	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.

F14 SF/12	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	RETOUCHED FRAG
F14 SF/13	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A.D.	CHERT	BIFACE FRAG (EXHAUSTED)
F14 SF/14	F14	F14 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D	CHERT	BIFACE (EXHAUSTED)
F14 SF/15	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A.D	CHERT	BIFACE FRAG.
F14 SF/16	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER/AWL
F14 SF/17	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A.D.	GREENSTONE	CELT FRAG.
F14 SF/18	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
F14 SF/19	F14	F14 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
F14 SF/20	F14	F14 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
F14 SF/21	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
F14 SF/22	F14	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG
F14 SF/23	F14	F14 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE (CRUDE)
F14 SF/24	F14	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	GROOVED SPHERE

APPENDIX V:

THE ZUBIN ARTEFACT DATA BASE BY ARTEFACT TYPE

SPECIAL FINDS MASTER BY:			ARTEFACT TYPE						
SF NO.	STR.	UNIT	LEVEL	CONTEXT	CONTEXT DESCRIPTION	PHASE	DATE	MATERIAL	DESCRIPTION
A1 SF/20	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED CANIS TOOTH
A1 SF/19	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED CANIS TOOTH
A1 SF/37	A1	A1-4,5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED FELIS TOOTH
A1 SF/38	A1	A1-4,5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	MAMMALIA	DRILLED FELIS TOOTH
A1 SF/226	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	MAMMALIA	WORKED UNGULATE BONE
A1 SF/44	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A.D.	AVES	DRILLED AVIAN LONG BONE
A4 SF/47	A4	A4 3	6	FILL	CONSTRUCTION FILL	XNIPEK	600-675 A.D.	AVES	DRILLED AVIAN LONG BONE
A4 SF/46	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	AVES	MODIFIED AVIAN LONG BONE
A1 SF/227	A1	A1 2	A1-B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	AVES	MODIFIED AVIAN LONG BONE
A1 SF/45	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	WORKED CONCH SHELL SECTION
B8 SF/1	B8	B8 1	2a	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	SHELL	WORKED CONCH SHELL SECTION
F14 SF/5	F14	F14 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	SHELL	WORKED CONCH SHELL SECTION
A1 SF/229	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	CONCH SHELL DISK
A1 SF/230	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	CONCH SHELL DISK
A1 SF/48	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A.D.	SHELL	CONCH SHELL RECTANGULATE
A1-SF/49	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A D.	SHELL	CONCH SHELL RECTANGULATE
A1 SF/47	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	CONCH SHELL RECTANGULATE
A1 SF/46	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	SHELL	CONCH SHELL RECTANGULATE
C9 SF/16	C9	C9 5	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	SHELL	CONCH SHELL BEAD
C9-SF/20	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
C9 SF/19	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
C9-SF/18	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	SHELL	CONCH SHELL BEAD
C9 SF/15	C9	C9-5	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	SHELL	CONCH SHELL BEAD
C9-SF/17	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650 350 B.C.	SHELL	CONCH SHELL BEAD
C9-SF/7	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A D	SHELL	CONCH SHELL BEAD
C9-SF/63	C9	LOOTER'S	C9 B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B.C.	SHELL	CONCH SHELL BEAD
C9 SF/62	C9	LOOTER'S	C9-B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B C.	SHELL	CONCH SHELL BEAD
A1 SF/41	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	OLIVE SHELL TINKLER
A1 SF/43	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	OLIVE SHELL TINKLER
A1 SF/42	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	SHELL	OLIVE SHELL TINKLER
A1 SF/40	A1	A1-4	A1 B/10	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	SHELL	OLIVE SHELL TINKLER
A4 SF/40	A4	A4 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	SHELL	OLIVE SHELL TINKLER
A4 SF/39	A4	A4-6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	SHELL	OLIVE SHELL TINKLER
E12 SF/1	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	SHELL	OLIVE SHELL TINKLER
E12 SF/2	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SHELL	OLIVE SHELL TINKLER
A4 SF/44	A4	A4 2	10A	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C-100A.D.	SHELL	SHELL BEAD (SPECIES UNKNOWN)
A4 SF/49	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A D	SHELL	SHELL BEAD (SPECIES UNKNOWN)
A1 SF/8	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	SHELL	SPONDYLUS SHELL BEAD
A1 SF/52	A1	A1 2	A1 B/8	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	SHELL	SPONDYLUS SHELL BEAD
A1 SF/55	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL BEAD
A4 SF/43	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	SHELL	CONCH SHELL PENDANT
A4 SF/1	A4	A4 3	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D	SHELL	FRESHWATER CLAM (CARVED)
A1 SF/51	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	FRESHWATER CLAM (DRILLED)
A1 SF/228	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	FRESHWATER CLAM (DRILLED)

A1 SF/50	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	SHELL	FRESHWATER CLAM (RIGHT VALVE)
A1 SF/54	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D	SHELL	SPONDYLUS SHELL INLAY
A1 SF/53	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL INLAY
A1 SF/13	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D	SHELL	SPONDYLUS SHELL ROSETTE
A1 SF/14	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	SHELL	SPONDYLUS SHELL ROSETTE
A1 SF/39	A1	A1 3	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	SHELL	CONCH SHELL ADORNO
A4 SF/13	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	SHELL	CONCH SHELL ADORNO
A1 SF/231	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	CONCH SHELL ADORNO
A1 SF/232	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	SHELL	CONCH SHELL ADORNO
A1 SF/301	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1-SF/302	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/303	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/306	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/305	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/258	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/259	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1-SF/255	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/256	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/257	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/254	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D.	HUMAN	FILED TOOTH
A1 SF/253	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A D.	HUMAN	FILED TOOTH
A1 SF/304	A1	A1 5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	HUMAN	FILED TOOTH
A1 SF/261	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A D.	HUMAN	HEMATITE INLAYED TOOTH
A1 SF/262	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	HUMAN	HEMATITE INLAYED TOOTH
A1 SF/264	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A D.	HUMAN	HEMATITE INLAYED TOOTH
A1 SF/265	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	HUMAN	INLAYED TOOTH
A1 SF/263	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	HUMAN	INLAYED TOOTH
A1 SF/260	A1	A1-2	A1-B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	HUMAN	JADEITE INLAYED TOOTH
A1-SF/58	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	HUMAN	JADEITE INLAYED TOOTH
A4 SF/6	A4	A4 3	2&3	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	CERAMIC	WHISTLE?
B6-SF/5	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	CERAMIC	CERAMIC WHISTLE?, FLUTE?
A4 SF/148	A4	A4 2a	5B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CERAMIC	DISK
B8 SF/22	B8	B8 3	1	HUM-FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	CERAMIC	DISK
B8 SF/11	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	CERAMIC	BEAD
A4 SF/32	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CERAMIC	SHERD BEAD
A1 SF/7	A1	A1 2	2	FILL	CONTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CERAMIC	MODIFIED SHERD
B8 SF/7	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	CERAMIC	MODIFIED SHERD
A1 SF/21	A1	A1 1	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CERAMIC	DRILLED SHERD
A1 SF/32	A1	A1 5	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750 875 A D.	CERAMIC	DRILLED SHERD
A4 SF/149	A4	A4 1a	7	FILL	CONSTRUCTION FILL	XNIPEK	600-675 A D.	CERAMIC	DRILLED SHERD
A4 SF/5	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	CERAMIC	DRILLED SHERD
B8 SF/6	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CERAMIC	DRILLED SHERD
B8 SF/3	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CERAMIC	DRILLED SHERD
F14 SF/3	F14	F14 1	3	FILL	CONTRUCTION FILL	LATE MAXIK	750-875 A D.	CERAMIC	DRILLED SHERD
A1 SF/250	A1	A1-4	1	HUM FALL	HUMUS/FALL	EARLY MAXIK	750-875 A D.	CERAMIC	DRILLED SHERD (CARVED)
B8-SF 5	B8	B8 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CERAMIC	FIGURINE ARM

A4 SF/38	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	CERAMIC	FIGURINE BODY FRAG.
C9 SF/43	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9-SF/14	C9	C9-5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9-SF/44	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9-SF/46	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
C9-SF/12	C9	C9 5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE BODY FRAG.
C9 SF/13	C9	C9 5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY FRAG.
A1 SF/249	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE BODY/LEG FRAG.
AP SF/5	PLAZA A	AP 1a	4	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE HAND
A1 SF/31	A1	A1 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	CERAMIC	FIGURINE HEAD
C9 SF/42	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE HEAD
C9 SF/11	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650 350 B.C.	CERAMIC	FIGURINE HEAD
A4 SF/45	A4	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CERAMIC	FIGURINE HEAD
AP SF/4	PLAZA A	AP 1a	4	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CERAMIC	FIGURINE LEG
B8 SF/23	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	CERAMIC	FIGURINE LEG
C9 SF/45	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CERAMIC	FIGURINE LEG
C9 SF/47	C9	C9 5	9	FILL	CONSTRUCTION FILL	EARLY KANLUK	900-650 B.C.	CERAMIC	FIGURINE LEG?
A1 SF/28	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	CERAMIC	DOLPHIN HEAD RED BOWL
A1 SF/26	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	CERAMIC	DOLPHIN HEAD RED BOWL
A1 SF/25	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	CERAMIC	DOLPHIN HEAD RED BOWL
A1 SF/24	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	CERAMIC	DOLPHIN HEAD RED PLATE
A1 SF/243	A1	A1-4	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	GARBUTT CREEK RED BOWL
B8 SF/8	B8	B8 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A D	CERAMIC	MINIATURE UNSLIPPED VESSEL
A1 SF/245	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	MONTEGO POLYCHROME VASE
A1 SF/241	A1	A1-4	A1 F/1	CACHE	SUBFLOOR CACHE	EARLY MAXIK	675-750 A D.	CERAMIC	MOUNT MALONEY BLACK BOWL
A1 SF/244	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CERAMIC	MOUNTAIN PINE RED DISH
A1 SF/23	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	ORANGE WALK INCISED BOWL
A1 SF/22	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CERAMIC	ORANGE WALK INCISED BOWL
A1 SF/266	A1	A1-4,5	A1 B/3	GRAVE	HAPHAZARD CIST	EARLY MAXIK	675-750 A.D.	CERAMIC	PARTIAL BELIZE RED
A4 SF/23	A4	A4 1a	A4 F/2	CACHE	DED CACHE	EARLY MAXIK	675-750 A.D	CERAMIC	PARTIAL BENQUE VIEJO POLYCHROME
A4 SF/150	A4	A4 1a	A4 F/2	CACHE	DED CACHE	EARLY MAXIK	675-750 A.D.	CERAMIC	PARTIAL MOUNT MALONEY BLACK
A1 SF/247	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A D.	CERAMIC	PUCTE BROWN? BOWL
A1 SF/248	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	CERAMIC	PUCTE BROWN? BOWL
A1 SF/246	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A D.	CERAMIC	PUCTE BROWN? JAR
A1 SF/239	A1	A1-4	A1 F/1	CACHE	SUBFLOOR CACHE	EARLY MAXIK	675-750 A D.	CERAMIC	SAN PEDRO IMPRESSED DISH
A1 SF/240	A1	A1-4	A1 F/1	CACHE	SUBFLOOR CACHE	EARLY MAXIK	675-750 A D.	CERAMIC	SAN PEDRO IMPRESSED DISH
A1 SF/27	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	CERAMIC	SAXCHE ORANGE POLYCHROME BOWL
A1 SF/242	A1	A1-4	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	CERAMIC	SOTERO RED BROWN VASE
101 SF/3	OP 101	101 1	3	COL./SPALL.	COLLUVIUM, WALL SPALLING	LATE MAXIK	750-875 A.D.	CHERT	BIFACE
A2 SF/3	PLAZA B	A2 1	A2 F/1	CACHE	DED. CACHE	LATE MAXIK	750-875 A D.	CHERT	BIFACE
A2 SF/5	PLAZA B	A2 1	A2 F/1	CACHE	DED CACHE	LATE MAXIK	750 875 A D	CHERT	BIFACE
A2 SF/4	PLAZA B	A2 1	A2 F/1	CACHE	DED CACHE	LATE MAXIK	750-875 A.D.	CHERT	BIFACE
A4 SF/91	A4	A4 1	3B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE
F14 SF/23	F14	F14 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE (CRUDE)
C9 SF/52	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	CHERT	BIFACE (IRREGULAR)
A1 SF/269	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	CHERT	BIFACE (POLISHED)

A1 SF/290	A1	A1 1	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100 350 A.D.	CHERT	BIFACE FRAG.
A1 SF/287	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A1 SF/292	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	CHERT	BIFACE FRAG.
A1 SF/272	A1	A1 3	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	CHERT	BIFACE FRAG.
A1 SF/298	A1	A1-4	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A1 SF/273	A1	A1-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	BIFACE FRAG.
A2-SF/6	PLAZA B	A2 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A.D.	CHERT	BIFACE FRAG.
A2 SF/9	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D	CHERT	BIFACE FRAG
A3 SF/2	A3	A3 1	BK.DIRT	BK DRT	BACKDIRT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG
A3 SF/3	A3	A3 7	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	CHERT	BIFACE FRAG
A3 SF/5	A3	A3-8	6	FILL	CONSTRUCTION FILL	LATE XAKAL	100 350 A.D	CHERT	BIFACE FRAG.
A4 SF/77	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	CHERT	BIFACE FRAG
A4 SF/97	A4	A4 1a	6B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG
A4 SF/105	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/100	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/126	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/137	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/110	A4	A4 2a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/95	A4	A4 2a	4a	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/79	A4	A4 2a	8	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	CHERT	BIFACE FRAG.
A4 SF/114	A4	A4 3	4	FLOOR	FLOOR SURFACE	EARLY MAXIK	675 750 A.D.	CHERT	BIFACE FRAG
A4 SF/113	A4	A4 3	4	FLOOR	FLOOR SURFACE	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
A4 SF/96	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
A4 SF/118	A4	A4-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
A4 SF/131	A4	A4-6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	BIFACE FRAG.
AP SF/7	PLAZA A	AP 1a	3	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	CHERT	BIFACE FRAG.
B6-SF/15	B6	B6-1a	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG
B6-SF/17	B6	B6-1a	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG
B6-SF/21	B6	B6-1b	3C	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
B6-SF/19	B6	B6 2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
B6-SF/9	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	CHERT	BIFACE FRAG.
B6-SF/8	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG
B8 SF/51	B8	B8 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG
B8 SF/50	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG
B8 SF/62	B8	B8 2	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG
B8 SF/61	B8	B8 2a	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CHERT	BIFACE FRAG
B8-SF/39	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG
B8 SF/46	B8	B8 3a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
D10 SF/4	D10	D10 1	3C	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A D	CHERT	BIFACE FRAG
D11 SF/1	D11	D11 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A D	CHERT	BIFACE FRAG.
E12 SF/17	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG
E12 SF/18	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG.
F14 SF/20	F14	F14 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG
F14 SF/21	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A D	CHERT	BIFACE FRAG
F14 SF/18	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	BIFACE FRAG.
F14 SF/15	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A.D.	CHERT	BIFACE FRAG.

F14 SF/19	F14	F14 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG.
F14-SF/22	F14	SURFACE	SURF	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
E12 SF/16	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
F14-SF/7	F14	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE FRAG.
A2-SF/11	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE (EXHAUSTED)
B8-SF/38	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE (EXHAUSTED)
F14 SF/14	F14	F14 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE (EXHAUSTED)
A1 SF/278	A1	A1 2	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	CHERT	BIFACE FRAG (EXHAUSTED)
A4-SF/145	A4	A4 2a	10	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B C.-100A.D	CHERT	BIFACE FRAG. (EXHAUSTED)
A4 SF/143	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A.D	CHERT	BIFACE FRAG (EXHAUSTED)
A4-SF/101	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A D	CHERT	BIFACE FRAG (EXHAUSTED)
A4 SF/93	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG (EXHAUSTED)
AP SF/6	PLAZA A	AP 1a	3	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	CHERT	BIFACE FRAG (EXHAUSTED)
B8-SF/53	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG (EXHAUSTED)
B8 SF/49	B8	B8 2a	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG (EXHAUSTED)
F14 SF/13	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG. (EXHAUSTED)
A1-SF/275	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG. (THIN)
A1-SF/274	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG (THIN)
A1-SF/280	A1	A1-3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG. (THIN)
A2-SF/10	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG (THIN)
A4-SF/138	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE FRAG (THIN)
B6-SF/14	B6	B6-1a	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG. (THIN)
B6-SF/20	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE FRAG. (THIN)
A4-SF/102	A4	A4 2	1-3 MIX	MIXED	MIXED	MAXIK	675-875 A D.	CHERT	BIFACE FRAG. (THIN)
A4 SF/92	A4	A4 1	3B	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
A4 SF/87	A4	A4 2	1-3 MIX	MIXED	MIXED	MAXIK	675-875 A D.	CHERT	BIFACE PREFORM (DISCARD)
A1-SF/295	A1	A1 1	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B C.-100A.D	CHERT	BIFACE PREFORM (DISCARD)
A1-SF/291	A1	A1-3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
A2 SF/12	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE PREFORM (DISCARD)
B8-SF/47	B8	B8-3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BIFACE PREFORM (DISCARD)
C9-SF/59	C9	C9-4	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	CHERT	BIFACE PREFORM (DISCARD)
C9-SF/57	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MAXIK	675-875 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12-SF/24	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12 SF/21	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12-SF/26	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	BIFACE PREFORM (DISCARD)
E12-SF/28	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	BIFACE PREFORM (DISCARD)
C9-SF/54	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	CHERT	BIFACE PREFORM (DISCARD)
C9-SF/60	C9	C9-4	2	FALL	FALL DEPOSIT	MIXED	UNKOWN	CHERT	MACROBLADE STEM
A1-SF/276	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CHERT	MACROBLADE STEM
A4-SF/104	A4	A4 2a	9	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B C.-100A.D	CHERT	CHOPPER (BIFACIAL HEAVY USE)
D10-SF/3	D10	D10 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL HEAVY USE)
A2-SF/7	PLAZA B	A2 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)
A4 SF/98	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)
A4-SF/119	A4	A4-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)
B6-SF/22	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)
B8 SF/52	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	CHOPPER (BIFACIAL)

B8 SF/37	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	CHOPPER (BIFACIAL)
C9-SF/58	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MIXED	675-875 A.D.	CHERT	CHOPPER (BIFACIAL)
D10 SF/7	D10	D10 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D	CHERT	CHOPPER (BIFACIAL)
E12 SF/23	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	CHOPPER (BIFACIAL)
E12 SF/29	E12	E12 1	3-4 MIX	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (BIFACIAL)
A1-SF/299	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	QUARTZITE	CHOPPER (BIFACIAL)
A4 SF/86	A4	A4 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER (UNIFACIAL)
F14 SF/8	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	CHOPPER/CELT FRAG.
D10 SF/6	D10	D10 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	BURIN/GRAVER/DRILL (UNIFACIAL)
A4 SF/82	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	DRILL (DISTAL, BIFACIAL)
A4 SF/144	A4	A4 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	DRILL (NORMAL, CONVERGENT)
A4 SF/122	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	DRILL (NORMAL, DISTAL)
A4-SF/134	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A.D	CHERT	DRILL (NORMAL, TRANSVERSE)
A1 SF/271	A1	A1-4	7	FILL	DIRT FILL	LATE KANLUK	650 350 B.C.	CHERT	DRILL (UNIFACIAL)
A4 SF/140	A4	A4 2a	8B	FILL	CONSTRUCTION FILL	LATE XAKAL	100 350 A.D.	CHERT	DRILL/BURIN (UNIFACIAL)
A4 SF/128	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	DRILL/GRAVER (NORMAL, DISTAL)
A3 SF/6	A3	A3-8	6	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	CHERT	DRILL/SCRAPER (NORMAL, CONVERGENT)
B8 SF/54	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	DRILL/SCRAPER (NORMAL, CONVERGENT)
C9-SF/55	C9	C9-4	2	FALL	FALL DEPOSIT	MIXED	675-875 A.D.	CHERT	SCRAPER (ALTERNATE, LATERAL)
A1 SF/270	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	CHERT	SCRAPER (CONVERGENT NORMAL)
A4 SF/108	A4	A4 1a	3F	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	SCRAPER (NORMAL, CONVERGENT)
A4 SF/147	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	SCRAPER (NORMAL, CONVERGENT)
F14 SF/10	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER (NORMAL, CONVERGENT)
A4 SF/129	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	SCRAPER (NORMAL, DISTAL)
B6 SF/12	B6	B6 1	3A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER (NORMAL, LATERAL)
F14 SF/9	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	SCRAPER (NORMAL, LATERAL)
A4 SF/94	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	SCRAPER (NORMAL, LATERAL; TWO MARGINS)
A4 SF/123	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	SCRAPER (NORMAL, TRANSVERSE)
E12 SF/20	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	SCRAPER (NORMAL, TRANSVERSE)
A4 SF/111	A4	A4 2a	4A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	SCRAPER /DRILL (NORMAL, TRANSVERSE)
F14 SF/16	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER/AWL
E12 SF/27	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	CHERT	SCRAPER/DRILL (NORMAL, TRANSVERSE)
B6 SF/16	B6	B6-1a	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	SCRAPER/KNIFE (NORMAL, CONVERGENT
A4 SF/89	A4	A4 5	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	BASALT	SCRAPER/KNIFE (NORMAL, LATERAL)
A4 SF/107	A4	A4 1	2C	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D	CHERT	SCRAPER/KNIFE (NORMAL, LATERAL)
F14 SF/12	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	RETOUCHED FRAG.
A2 SF/8	PLAZA B	A2 1	2	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	NOTCHED FLAKE
A4 SF/76	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	UTILIZED FLAKE
A4 SF/103	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	CHERT	UTILIZED FLAKE
A4 SF/133	A4	A4 6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	CHERT	UTILIZED FLAKE
A4 SF/132	A4	A4 6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	UTILIZED FLAKE
D10 SF/5	D10	D10 2	1A	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	CHERT	UTILIZED FLAKE
A4 SF/146	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	CORE FRAG
A1 SF/35	A1	A1 3	A1 B/6	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	DISTAL SECTION OF BLADE
A1 SF/252	A1	A1-4	7	FILL	DIRT FILL	LATE KANLUK	650-350 B C.	OBSIDIAN	DISTAL SECTION OF BLADE
A1 SF/33	A1	A1 5	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	DISTAL SECTION OF BLADE

AP SF/2	PLAZA A	AP 1	4	FILL	CONTRUCTION FILL	LATE KANLUK	650 350 B.C.	OBSIDIAN	DISTAL SECTION OF BLADE
D10 SF/2	D10	D10 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	DISTAL SECTION OF BLADE
A4 SF/57	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	OBSIDIAN	FLAKE
A4 SF/65	A4	A4 2a	7	FILL	DIRT FILL	XNIPEK	600-675 A.D.	OBSIDIAN	FLAKE
F14 SF/4	F14	F14 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	FLAKE
A1 SF/15	A1	A1 1	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/18	A1	A1 1	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B C.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/2	A1	A1 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750 875 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/6	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/30	A1	A1 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A3 SF/1	A3	A3 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/8	A4	A4 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/31	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4-SF/34	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/30	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/70	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/29	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/28	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/27	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/26	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/25	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/36	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/51	A4	A4 1a	7	FILL	CONSTRUCTION FILL	XNIPEK	600 675 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/15	A4	A4 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/20	A4	A4 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/18	A4	A4 2	1&2&3	HU FA FI	HUMUS/FALL/FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/14	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/16	A4	A4 2	1&2&3	HU-FA FI	HUMUS/FALL/FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/17	A4	A4 2	1	HUMUS	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/19	A4	A4 2	1&2&3	HU FA FI	HUMUS/FALL/FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/21	A4	A4 2a	4a	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/56	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B C.-100A D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/58	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/62	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/12	A4	A4 2a	2&3	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/63	A4	A4 2a	7	FILL	DIRT FILL	XNIPEK	600-675 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/64	A4	A4 2a	7	FILL	DIRT FILL	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/4	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/2	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/68	A4	A4 3	6	FLOOR	FLOOR SURFACE	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/53	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/67	A4	A4 3	6	FLOOR	FLOOR SURFACE	XNIPEK	600-675 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/66	A4	A4 3	6	FLOOR	FLOOR SURFACE	XNIPEK	600-675 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/22	A4	A4 5	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
AP SF/1	PLAZA A	AP 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B6 SF/4	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE

B6 SF/7	B6	B6-1b	3C	FILL	CONSTRUCTION FILL	LATE MAXIK	750 875 A.D	OBSIDIAN	MEDIAL SECTION OF BLADE
B6 SF/3	B6	B6-2	1	SURFACE	SURFACE DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/16	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/13	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/12	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/15	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/14	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/30	B8	B8 2a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/29	B8	B8 2a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/31	B8	B8 2a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/17	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/18	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750 875 A D	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/25	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/24	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/26	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
B8 SF/27	B8	B8 3a	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
C9-SF/8	C9	C9-2	2	FALL	FALL DEPOSIT	MIXED	675-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
D10 SF/1	D10	D10 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
E12 SF/7	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
C9-SF/4	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE 350 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
C9-SF/6	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE 350 A D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A4 SF/61	A4	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	OBSIDIAN	MEDIAL SECTION OF BLADE
B6 SF/2	B6	B6-2	2	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
A1 SF/225	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100 350 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE
100 SF/1	OP 100	100 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	OBSIDIAN	MEDIAL SECTION OF BLADE, RETOUCHED
A1 SF/3	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/16	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/5	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/10	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/11	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/12	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/4	A1	A1 2	2	CACHE	CACHE	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/17	A1	A1 2	A1 B/2	GRAVE	CAPPED PIT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/36	A1	A1 3	A1 B/6	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/238	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
A1 SF/236	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	OBSIDIAN BLADE
B6-SF/1	B6	B6-2	2	FALL	FALL MATERIALS	LATE MAXIK	750-875 A.D.	OBSIDIAN	OBSIDIAN BLADE
B8 SF/4	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	OBSIDIAN BLADE
101 SF/1	OP 101	101 1	2	COLLUV	COLLUVIUM	LATE MAXIK	750-875 A.D	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/1	A1	A1 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/237	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/233	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/234	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/235	A1	A1-4	A1 B/12	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1-SF/251	A1	A1-4	7B	PALEOSOL	PALEOSOL	LATE KANLUK	650 350 B C.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A1 SF/34	A1	A1-4	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE

A2 SF/1	PLAZA B	A2 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/10	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/52	A4	A4 1a	6D	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/33	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/35	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/48	A4	A4 1a	6E	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/42	A4	A4 1a	6E	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/50	A4	A4 1a	7	FILL	CONSTRUCTION FILL	XNIPEK	600 675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/37	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/3	A4	A4 3	4A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/7	A4	A4 3	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
A4 SF/69	A4	A4 3	6	FLOOR	FLOOR SURFACE	XNIPEK	600-675 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B6 SF/6	B6	B6-1a	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/2	B8	B8 1	3A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/10	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/21	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/9	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/32	B8	B8 2a	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/28	B8	B8 2a	4	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/20	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
C9-SF/9	C9	C9-4	2	FALL	FALL DEPOSIT	MIXED	675-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
E12 SF/6	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
E12 SF/5	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
F14 SF/1	F14	F14 1	2A	FALL	FALL MATERIALS	LATE MAXIK	750 875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE
B8 SF/19	B8	B8 3	1	HUM FALL	HUMUS/FALL	LATE MAXIK	750-875 A.D.	OBSIDIAN	PROXIMAL SECTION OF BLADE (NOTCHED)
A4-SF/54	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C -100A.D	OBSIDIAN	SHATTER
A4 SF/59	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	OBSIDIAN	SHATTER
A4 SF/60	A4	A4 2a	10	FILL	DIRT FILL	EARLY XAKAL	350B.C.-100A.D	OBSIDIAN	SHATTER
AP SF/3	PLAZA A	AP 1	4	FILL	CONTRUCTION FILL	LATE KANLUK	650 350 B.C.	OBSIDIAN	SNAPPED PORTION OF BLADE
A1-SF/293	A1	A1-4	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	QUARTZITE	HAMMERSTONE
A1 SF/296	A1	A1-4	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	QUARTZITE	HAMMERSTONE
A4 SF/141	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	QUARTZITE	HAMMERSTONE
B6 SF/11	B6	B6 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750 875 A D.	QUARTZITE	HAMMERSTONE
B8 SF/55	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	QUARTZITE	HAMMERSTONE
A1 SF/281	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	CHERT	HAMMERSTONE
A2 SF/14	PLAZA B	A2 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	CHERT	HAMMERSTONE
A4 SF/88	A4	A4 2a	2-3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	CHERT	GRINDING/POLISHING STONE
A4 SF/75	A4	A4 2a	8	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	GRANITE	GRINDING/POLISHING STONE
C9-SF/61	C9	C9 5	4	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	QUARTZITE	GRINDING/POLISHING STONE
A4 SF/90	A4	A4 2a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	SERPENTINE	GRINDING/POLISHING STONE
B6-SF/18	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	GROOVED SPHERE
F14 SF/24	F14	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	GROOVED SPHERE
A1 SF/285	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	ANDESITE	CELT OR MANO
A1 SF/268	A1	A1 5	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO
A1 SF/294	A1	A1 1	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	ANDESITE	MANO FRAG.
A4 SF/55	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	BASALT	MANO FRAG.

100 SF/2	OP.100	100 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A1 SF/282	A1	A1 3	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A2 SF/16	PLAZA B	A2 1	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	MANO FRAG.
A3 SF/4	A3	A3 6	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/130	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/106	A4	A4 1	2C	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/120	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/84	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A4 SF/125	A4	A4 2a	4a	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A4 SF/115	A4	A4 3	4	FLOOR	FLOOR SURFACE	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A4 SF/112	A4	A4 3	4	FLOOR	FLOOR SURFACE	EARLY MAXIK	675-750 A.D.	GRANITE	MANO FRAG.
A4 SF/80	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
A4 SF/117	A4	A4-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B6 SF/13	B6	B6-1	3A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B6-SF/10	B6	B6-2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B6-SF/23	B6	B6 2	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/43	B8	B8 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/41	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/40	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/36	B8	B8 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
B8 SF/35	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
D10-SF/8	D10	D10 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
F14 SF/11	F14	F14 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	MANO FRAG.
E12 SF/19	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	LIMESTONE	MANO FRAG.
A4 SF/109	A4	A4 1a	3F	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	QUARTZ MASSIVE	MANO FRAG
A4 SF/121	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	QUARTZ MASSIVE	MANO FRAG
A4 SF/127	A4	A4 2	1 3 MIX	MIXED	MIXED	MAXIK	675-875 A.D.	QUARTZ MASSIVE	MANO FRAG.
A1 SF/289	A1	A1 1	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	QUARTZ MASSIVE	METATE FRAG.
A4 SF/73	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	QUARTZITE	METATE FRAG.
E12 SF/8	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	LIMESTONE	METATE FRAG.
B8 SF/56	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	ANDESITE	METATE FRAG.
C9 SF/51	C9	C9-5	3	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	SYENITE	METATE FRAG.
A1 SF/286	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	BASALT	METATE FRAG.
E12 SF/22	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GABBRO	METATE FRAG.
A1 SF/284	A1	A1-2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	METATE FRAG.
A1 SF/267	A1	A1 2	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A1 SF/279	A1	A1 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
A1 SF/297	A1	A1-4	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675 750 A D.	GRANITE	METATE FRAG.
A2 SF/2	PLAZA B	A2 1	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
A2 SF/15	PLAZA B	A2 1	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
A4 SF/74	A4	A4 1a	5	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/99	A4	A4 2	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
A4 SF/124	A4	A4 2a	6b	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/135	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG
A4 SF/71	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/142	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.

A4 SF/72	A4	A4 3	5A	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A4 SF/81	A4	A4 3	2	FALL	FALL DEPOSIT	LATE MAXIK	750 875 A D.	GRANITE	METATE FRAG.
A4 SF/78	A4	A4 3	6	FLOOR	FLOOR SURFACE	XNIPEK	600-675 A.D.	GRANITE	METATE FRAG.
B8 SF/63	B8	B8 1	3A	FALL	FALL DEPOSIT	EARLY MAXIK	750-875 A D.	GRANITE	METATE FRAG.
B8 SF/44	B8	B8 1	3B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/34	B8	B8 2	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
B8 SF/42	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/33	B8	B8 2	2B	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
B8 SF/57	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/60	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
B8 SF/59	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/58	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
B8 SF/45	B8	B8 3	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
E12 SF/25	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	GRANITE	METATE FRAG.
E12 SF/11	E12	E12 1	2	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
E12 SF/13	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG
E12 SF/12	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	GRANITE	METATE FRAG.
E12 SF/14	E12	E12 1	3	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A D.	GRANITE	METATE FRAG.
E12 SF/10	E12	SURFACE	SURF	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
E12 SF/15	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG
E12 SF/9	E12	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
A4 SF/85	A4	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
F14 SF/6	F14	SURFACE	SURF.	SURFACE	SURFACE DEPOSIT	UNKNOWN	UNKNOWN	GRANITE	METATE FRAG.
A4 SF/139	A4	A4 3	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	GRANITE	METATE FRAG.
A3 SF/7	A3	A3 6	6	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	SLATE	CELT
F14 SF/17	F14	F14 1	2A	FILL	CONSTRUCTION FILL	LATE MAXIK	750-875 A.D.	GREENSTONE	CELT FRAG.
C9 SF/27	C9	C9-5	5	FILL	CONSTRUCTION FILL	EARLY XAKAL	350B.C.-100A.D	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/29	C9	C9-5	6	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/28	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/35	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/36	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/31	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/34	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/32	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/30	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/26	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/38	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9 SF/37	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/39	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/41	C9	LOOTER'S	C9-B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650 350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/40	C9	LOOTER'S	C9-B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
C9-SF/48	C9	LOOTER'S	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	GREENSTONE TRIANGULATE
A1 SF/288	A1	A1 2	2	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	LIMESTONE	TRIANGULATE
C9 SF/49	C9	C9-5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	GREENSTONE	MODIFIED PEBBLE
C9-SF/33	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	GREENSTONE	MODIFIED PEBBLE
C9 SF/50	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A D.	GREENSTONE	MODIFIED PEBBLE

A1 SF/9	A1	A1 2	A1 B/1	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/142	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D	JADEITE	JADEITE BEAD
A1-SF/141	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675 750 A.D	JADEITE	JADEITE BEAD
A1 SF/203	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D	JADEITE	JADEITE BEAD
A1 SF/143	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/138	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/222	A1	A1 3	A1 B/6	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/140	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/145	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/132	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/134	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/130	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/131	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/147	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/133	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/137	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/135	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/136	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/144	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/128	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/156	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/155	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D	JADEITE	JADEITE BEAD
A1 SF/220	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/221	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/87	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/159	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/158	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/88	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/157	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/146	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/125	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/154	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/153	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/152	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/151	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/150	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/149	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/148	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/129	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/86	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/127	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/99	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/97	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/105	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/104	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/103	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD

A1 SF/102	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/101	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D	JADEITE	JADEITE BEAD
A1 SF/100	A1	A1 3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/107	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/98	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/109	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D	JADEITE	JADEITE BEAD
A1 SF/96	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/223	A1	A1 3	A1 B/7	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675 750 A D.	JADEITE	JADEITE BEAD
A1 SF/95	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/94	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/93	A1	A1 3	A1 B 5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/92	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/106	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/126	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/108	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/118	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/116	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/124	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/123	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/122	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/121	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/120	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/119	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/219	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/117	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/110	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/89	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/115	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/114	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/113	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/112	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/111	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/139	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/90	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/176	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/175	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/181	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/180	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF 179	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/178	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/177	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/67	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/68	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/183	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/69	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/184	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD

A1 SF/174	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/204	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/70	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/205	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/206	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/173	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/172	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/182	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/85	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/195	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/193	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D	JADEITE	JADEITE BEAD
A1 SF/202	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/201	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/200	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/199	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/198	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/197	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/196	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/171	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/194	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/185	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/192	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/191	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/190	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/189	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/188	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/187	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/186	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/71	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/218	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/212	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/214	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/209	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/210	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/211	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/163	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/162	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/161	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/169	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/213	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/208	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/83	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/84	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/215	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/216	A1	A1-3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/160	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD

A1 SF/217	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/82	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/170	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/207	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	JADEITE BEAD
A1 SF/79	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/78	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/72	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675 750 A.D.	JADEITE	JADEITE BEAD
A1 SF/73	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/74	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/75	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/76	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/77	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/164	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/91	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/168	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/81	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1-SF/165	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/167	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/166	A1	A1-3	A1-B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
A1 SF/80	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	JADEITE BEAD
C9-SF/24	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9-SF/22	C9	C9-5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9 SF/21	C9	C9 5	8	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9 SF/25	C9	C9-5	7	FILL	CONSTRUCTION FILL	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
C9-SF/5	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	JADEITE	JADEITE BEAD
C9-SF/1	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	JADEITE	JADEITE BEAD
C9-SF/3	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	JADEITE	JADEITE BEAD
C9-SF/2	C9	LOOTER'S	1A	LOOT BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE-350 A.D.	JADEITE	JADEITE BEAD
C9-SF/23	C9	LOOTER'S	C9-B/1	GRAVE	SIMPLE GRAVE	LATE KANLUK	650-350 B.C.	JADEITE	JADEITE BEAD
A1 SF/224	A1	A1 2	A1 B/9	GRAVE	SIMPLE CRYPT	LATE XAKAL	100-350 A.D.	JADEITE	JADEITE BEAD
A1 SF/56	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	LARGE JADEITE BEAD
A1 SF/29	A1	A1 2	1	SURFACE	SURFACE DEPOSIT	LATE MAXIK	750-875 A.D.	LIMESTONE	BEAD
A4 SF/9	A4	A4 1	1	HUMUS	HUMUS LAYER	LATE MAXIK	750-875 A.D.	LIMESTONE	BEAD
C9 SF/10	C9	C9-5	1-2 MIX	HUM FALL	HUMUS/FALL	MIXED	675-875 A.D.	SLATE	PENDANT
A1 SF/65	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	JADEITE	INLAY
A1 SF/61	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/60	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/66	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/62	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/63	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A1 SF/64	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A.D.	JADEITE	INLAY
A4 SF/41	A4	A4 3	5B	MIDDEN	MIDDEN ACCUMULATION	XNIPEK	600-675 A.D.	JADEITE	INLAY
A1 SF/300	A1	A1 3	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A.D.	LIMESTONE	AWL
A2 SF/13	PLAZA B	A2 1	4	FILL	CONSTRUCTION FILL	LATE XAKAL	650-350 B.C.	LIMESTONE	AWL/CHISEL
E12 SF/3	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	LIMESTONE	EARPLUG FRAG.
A1 SF/277	A1	A1-4	1	HUMUS	HUMUS DEPOSIT	LATE MAXIK	750-875 A.D.	LIMESTONE	LEG?

C9-SF/53	C9	LOOTER'S	1A	LOOT-BACK	LOOTER'S BACKDIRT	FORMATIVE	PRE 350 A D	QUARTZITE	PESTLE
A4-SF/116	A4	A4 3	4	FLOOR	FLOOR SURFACE	EARLY MAXIK	675-750 A D.	LIMESTONE	PESTLE?
A1 SF/283	A1	A1 3	4	FILL	CONSTRUCTION FILL	LATE XAKAL	100-350 A D.	LIMESTONE	RECTANGULATE
101 SF/2	OP 101	101 2	1	HUMUS	SLOPEWASH, HUMUS	LATE MAXIK	750-875 A D.	LIMESTONE	SPINDLE WHORL
A1 SF/57	A1	A1 3	A1 B/5	GRAVE	SIMPLE CRYPT	EARLY MAXIK	675-750 A D.	LIMESTONE	SPINDLE WHORL
A4 SF/11	A4	A4 1	2A	FALL	FALL DEPOSIT	LATE MAXIK	750-875 A D.	LIMESTONE	SPINDLE WHORL
A4 SF/24	A4	A4 1a	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D.	LIMESTONE	SPINDLE WHORL (CARVED)
F14 SF/2	F14	F14 1	3	FILL	CONTRUCTION FILL	LATE MAXIK	750-875 A D.	LIMESTONE	BROKEN SPINDLE WHORL
C9-SF/56	C9	C9-5	1 2 MIX	HUM FALL	HUMUS/FALL	MIXED	675 875 A D	SLATE	DISK (BROKEN)
A4 SF/83	A4	A4-6	3	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A D	SLATE	SLATE DEBITAGE (SAWN)
B8 SF/48	B8	B8 2a	MIX	MIXED	WALL CLEARING	MAXIK	675-875 A D.	SLATE	WORKED FRAG
E12 SF/4	E12	E12 1	4	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D	SLATE	WRENCH FRAG.
A4 SF/136	A4	A4 2a	6	FILL	CONSTRUCTION FILL	EARLY MAXIK	675-750 A.D.	SLATE	WRENCH FRAG.

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